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Body-Surface Pressure Data on Two Monoplane-Wing Missile Configurations With Elliptical Cross Sections at Mach 2.50

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Scientific and Technical Information Branch

SUMMARY

Tabulated body-surface pressure data for two monoplane-wing missile configurations are presented and analyzed. The body of one configuration had a 3/1 elliptical cross section along its entire length, and the other had a blunted axisymmetric nose which blended into a 3/1 elliptical midbody which blended into an axisymmetric base. Body pressure data are presented for body-alone, body-tail, and body-wing-tail combinations. For the last combination, data are presented for tail-fin deflection angles of 0° and 30° to simulate pitch, yaw, and roll control for both configurations. The data generally cover angles of attack from -5° to 25° and angles of roll from 0° to 90° at a Mach number of 2.50 and a Reynolds number of 6.56 × 10⁶ per meter.

Very consistent, systematic trends with angle of attack and angle of roll were observed in the data, and very good symmetry was found at a roll angle of 0°. Body pressures depended strongly on the local body cross-section shape, with very little dependence on the upstream shape. Undeflected tail fins had only a small influence on the pressures on the aft end of the body; however, deflected tail fins caused large changes in the pressures.

INTRODUCTION

The continuing development of computational methods for predicting the aerodynamics of missiles requires extensive experimental data to evaluate the accuracy and reliability of these methods. Research in advanced missile concepts has shown that missiles with elliptical bodies have definite aerodynamic advantages over the more conventional circular missile shape (ref. 1). For example, reference 1 has shown that elliptical missiles provide a better match between longitudinal and directional stability than exists for circular missiles. This research has led to interest in developing computational methods applicable to noncircular missile shapes (ref. 2).

Recently an extensive wind-tunnel experiment (ref. 3) was conducted to obtain force and moment data on a series of nine elliptical missile configurations to provide a systematic set of data for such configurations. For a more fundamental assessment of the computational methods, however, detailed pressure distributions were needed on missiles with noncircular bodies. Hence, the present study was undertaken to provide these data.

Pressure models of two of the configurations of the reference 3 study were constructed and tested at the same flow conditions of the earlier force test. Of special interest were the pressure distributions on these bodies for roll orientations, since these would provide severe test cases for the computational methods. Data were obtained for body-alone, body-tail, and body-wing-tail combinations.

In order to present these data in a convenient form to permit easy comparison with computational methods, all pressure data in this paper are listed in tabular form. Selected data have been plotted for illustration and discussion purposes.

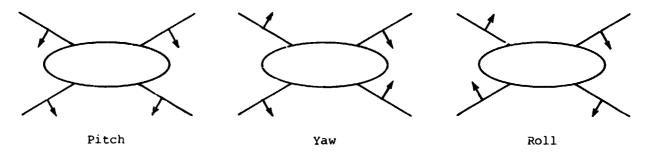
NOMENCLATURE

The measurements and calculations in this investigation were made in U.S. Customary Units. All values were converted to SI Units for presentation in this paper.

- a ellipse semimajor axis
- b ellipse semiminor axis
- C_p pressure coefficient, $\frac{p_1 p_{\infty}}{q_{\infty}}$ (CP in computer tables)
- L body length, 71.1 cm
- p, local surface pressure
- p_{∞} free-stream static pressure
- q_{∞} free-stream dynamic pressure
- X axial coordinate from body nose
- α angle of attack, deg (ALPHA in computer tables)
- θ polar coordinate angle, measured counterclockwise from top looking upstream, deg (THETA in computer tables)

Deflections:

The following sketch illustrates the tail deflections used for pitch, yaw, and roll. The arrows indicate the direction of the leading-edge deflection. Deflection angles of 0° and 30° were tested. The sketch is drawn looking upstream.



MODELS

Drawings of the two models tested are shown in figures 1(a) and 1(b). The body of one model had a pointed nose and a 3/1 elliptical cross section along the entire length of the body (the same as body IX of ref. 3). The second body had a blunt nose which blended into a 3/1 elliptical midbody which blended into a circular base (the same as body V of ref. 3). The first body is identified in this paper as the sharp-

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nose body, and the second body is called the blunt-nose body. The body cross sections can be represented by an ellipse with the distribution of semimajor and semiminor axes given in the following table:

Sharp-nose body			Blunt-nose body				
X/L	a/L	b/L	X/L	a/L	b/L		
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
.0100	.0071	.0024	.0216	.0217	.0217		
.0200	.0118	.0039	.0258	.0222	.0219		
.0250	.0140	.0047	.0799	.0337	.0257		
.0500	.0234	.0078	.1340	.0452	.0287		
.0750	.0314	.0105	. 188 1	.0564	.0311		
.1000	.0388	.0 129	.2423	.0673	.0332		
.1255	.0455	.0152	.2964	.0777	.0349		
.150€	.0518	.0 173	.3505	.0875	.0365		
.2000	.0633	.0211	.4046	.0965	.0378		
.2500	.0737	.0246	.4587	.1048	.0389		
.3000	.0831	.0277	.5669	.1177	.0405		
.3500	.0915	.0305	.6210	.1220	.0410		
.4000	.0991	.0330	.6481	.1233	.0412		
.4500	.1059	.0353	.6800	.1237	.0412		
.5000	.1118	.0373	.7000	.1229	.0413		
.5750	.1188	.0396	.7292	.1190	.0418		
.6000	.1206	.0402	.7500	.1166	.0421		
.6250	.1221	.0407	.7833	.1093	.0431		
.6500	.1231	.0410	.8000	.1066	.0435		
.6800	.1237	.0412	.8314	.0965	.0452		
.7000	.1234	.0411	.8500	.0945	.0458		
.7292	.1221	.0407	.8716	.0867	.0476		
.7500	.1213	.0404	.9000	.0813	.0492		
.7833	.1 188	.0396	.9250	.0748	.0514		
.8000	.1180	.0393	.9500	.0687	.0540		
.8314	.1146	.0382	.9750	.0635	.0567		
.8500	.1139	.0380	1.0000	.0595	.0595		
.8716	.1113	.0371			•		
.9000	.1096	.0365					
.9250	.1075	.0358					
.9500	. 1056	.0352					
.9750	.1039	.0346					
1.0000	.1030	.0343					

Both configurations had the same basic wing planform shape; however, the exposed planform areas were different because of the differences in body shape. Figure 1(c) shows the basic wing planform shape and the approximate wing-body juncture location of each configuration.

Both configurations used identical tail surfaces whose trailing edges were mounted flush with the base of the model at $\pm 30^{\circ}$ from the horizontal plane. The root chords of the tail fins were leveled to match the local slope of the body.

Figure 1(d) shows the geometric characteristics of the tail fins. The tail spans of the two configurations were slightly different because of their being mounted on afterbodies of different shapes.

Both the wings and tails were removable to allow testing of various component combinations. Filler plugs were used to provide a smooth body contour when the wings and/or tails were removed. The tails could be manually deflected through ±30° in 10° increments.

Some general geometric characteristics common to both configurations are listed in the following table:

Body: Length, m	0
	_
Wing:	
Leading-edge sweep, deg 75.0	0
Trailing-edge sweep, deg	D
Span, m 0.229	9
Dihedral angle, deg	
Tail:	
Inboard leading-edge sweep, deg	0
Outboard leading-edge sweep, deg	0
Trailing-edge sweep, deg	0
Inboard taper ratio 0.44	
Outboard taper ratio	
Dihedral angle, deg ±30.0	
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Both bodies were instrumented with pressure orifices located at nine longitudinal stations. Figure 2 shows the axial locations of these stations. Body cross-section shapes at each station are shown in figure 3. Also shown in this figure is the circumferential distribution of pressure orifices at each station, as indicated by the location of the small tick marks. All orifices were the open ends of thin-wall tubing embedded normal to and flush with the model surface. All tubing had an outside diameter of 0.46 mm. Neither the wing nor tail surfaces were instrumented. Figure 4 shows photographs of both configurations mounted in the wind tunnel.

TEST CONDITIONS AND APPARATUS

The test was conducted in the low Mach number test section of the Langley Unitary Plan Wind Tunnel. This facility is a variable-pressure, continuous-flow tunnel with an asymmetric sliding-block nozzle ahead of the test section that permits continuous variation in Mach number. The test section is approximately 2.1 m long by 1.2 m square. A more complete description of this facility can be found in reference 4.

The test was performed at the following nominal conditions:

Mach number 2.50
Stagnation temperature, K 339
Stagnation pressure, kPa 81.36
Reynolds number, per meter

These test conditions were chosen to match those of the test performed on the force models published in reference 3. Also, grit was applied to the models in the same manner as was done in reference 3 to induce boundary-layer transition. Grit consisting of ASTM No. 35 sand particles was affixed to the nose, wing, and tail surfaces of both configurations. These particles were spaced a nominal 0.14 cm apart and were located 3.05 cm aft of the nose and 1.02 cm aft (streamwise) of the leading edges of all wing and tail surfaces.

Model angle of attack was measured with an accelerometer mounted inside the body. The measured angles of attack have been corrected for flow angularity in the test section. Model roll orientations were obtained from a roll coupling attached between the model sting and the angle of attack mechanism.

Body pressures were measured with gages connected to the orifice tubes by a scanning-valve system located outside the tunnel. Approximately 4 m of tubing was required to connect the model orifices to the gages. Because of the scanning nature of the gages and the long lengths of tubing required, care was taken to ensure that sufficient time was allowed for the pressure to settle for each orifice before advancing to the next orifice. Reference pressures connected to the scanning valves were used to provide gage calibrations for each test point. The rated accuracy of the gages was ± 0.5 percent of the full-scale range. For the gages and test conditions of this investigation, this range corresponds to an accuracy in pressure coefficient of about ± 0.01 .

The sharp-nose body contained 176 pressure orifices and the blunt-nose body contained 180. All these orifices except two on the blunt-nose body (at X/L = 0.30, $\theta = 255^{\circ}$ and at X/L = 0.60, $\theta = 180^{\circ}$) performed satisfactorily. The data from these two orifices were obviously incorrect and thus have not been included in this paper.

PRESENTATION OF DATA

Data were taken for body-alone, body-tail, and body-wing-tail configurations on both mcdels at angles of attack from about -5° to 25° and roll angles from 0° to 90°. In addition, data at ϕ = 0° were obtained for tail-fin deflections of 0° and 30° to simulate pitch, yaw, and roll control.

All pressure data have been reduced to pressure coefficient form and are listed in tables 1 and 2. It should be noted from these tables that in many cases data for the first six stations are not presented. The reason for this absence is that since these stations were all well upstream of the junction of the wing leading edge with the body (see fig. 2), the pressures at these stations were not affected by the various wing and tail combinations and hence were not recorded for all combinations.

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The following table presents a cummary of the test conditions for which data were recorded and whether the data were for all nine stations or for only the last three.

Configuration	Tail-fin deflection, (a)				of -	Table				
	deg	deg	-5	0	5	10	15	20	25	
Sharp-nose model										
Body alone	0 22.5 45.0		*	*	* *	* †	* † †	* †	+ +	1(a)
	67.5 90.0		*	*	•	† *	*	•	•	
Body-tail	0 22.5 45.0 90.0	0	+	++	+ + +	+ + +	† † †	† †	† † †	1(b)
Body-wing-tail	0 22.5 45.0 67.5 90.0	0	*	*	*	* * * * *	* * * *	* * * *	•	1(c)
	0 0 0	^b 30 ^c 30 ^d 30	†	† †	† †	† †	†	† †	† †	
		Blunt-	-nose	mode	:1					
Body alone	0 22.5 45.0 67.5 90.0		*	*	* * *	* * *	*	*	*	2(a)
Body-tail	0 22.5 45.0	0 0 0	,	+	† †	† †	† †	† †	† †	2(b)
Body-wing-tail	0 22.5 45.0 67.5 90.0 0	o c30 c30	† † †	+ + + +	† † † † †	+ + + + + + +	† † † † † † †	† † † † †	† † † † † †	2(c)

^aAn asterisk indicates data presented for all nine stations, and a dagger indicates data presented for last three stations only.

Description deflection.

CYAW deflection.
dRoll deflection.

Selected data from tables 1 and 2 have been plotted in the appendix so that interested readers can more easily inspect the longitudinal and circumferential pressure distributions on the two models.

ANALYSIS OF DATA

Figures 5 to 9 contain summary plots to illustrate the effects of the various test variables on the pressure distributions. This section of the paper contains an analysis of the effects of these variables.

Effect of Body Shape

The differences in body shape between the two test models can be seen by examining the cross sections of these bodies shown in figure 3. The blunt-nose body was almost circular near the front and aft ends, whereas the sharp-nose body was a 3/1 ellipse along its entire length. In the midbody region, however, the two bodies were similar in cross-section shape.

The differences in pressure distributions resulting from these two body shapes are shown in figure 5 for X/L values of 0.10, 0.60, and 0.95 for an angle of attack of 20° and a roll angle of 0°. The different cross-section shapes of these two bodies near the front and aft ends have a strong influence on the pressure distributions in these regions. However, near the midbodies (fig. 5(b)), where the cross sections were similar, the pressure distributions are almost identical. This result indicates that the pressures strongly depend on the local cross-section shape with very little dependence on the upstream body shape.

Since the nose shape had little effect downstream of the nose region, the effects of the remaining test variables will be analyzed from data taken on the sharp-nose body only.

Effect of Angle of Attack

The effect of angle of attack is illustrated in figure 6. This figure contains data for the sharp-nose body at X/L = 0.60 and $\phi = 0^{\circ}$. As would be expected, increasing the angle of attack results in a systematic increase in pressure coefficient on the windward side of the body and a systematic decrease on the leeward side.

Since all data in figure 6 are for a roll angle of 0°, right-left flow symmetry should exist. Examination of this figure reveals that there is extremely good symmetry in the data, which is an indication of the good accuracy of the measurements.

Effect of Roll Angle

The effect of roll angle on the pressure distributions for the sharp-nose body at X/L = 0.60 and a 20° angle of attack is shown in figure 7 for roll angles of 0° to 90°. The increasing slope of the pressure distribution curves with increasing roll angle is caused by the more streamlined cross-section profile being exposed to the flow as the body is rolled from 0° to 90°. As can be seen from the peak pres-

sures, the stagnation point on the windward side of the body moves from the minor axis (θ = 180°) to the major axis (θ = 270°) as the roll angle progresses from 0° to 90°.

Effect of Fins

The pressures on the aft end of the bodie. can be influenced by the presence of the fins. This effect on the pressure distributions can be observed at the X/L = 0.95 station with and without fins. Figure 8 shows these pressures for the sharp-nose model at ϕ = 0° and α = 20° for body-alone, body-tail, and body-wing-tail configurations. All fins were undeflected. Adding the tails to the body causes small changes in pressure on the windward surface and on the outboard regions of the leeward surface. Adding the wings to the body-tail combination has little additional effect on either surface except in outboard regions. The leeward pressures in the inboard region and the windward pressures near the stagnation point are virtually identical for all three combinations.

Effect of Tail-Fin Deflections

The effect of several tail-fin deflections on the pressure distributions for the sharp-nose body-wing-tail configuration at X/L = 0.95, ϕ = 0°, and α = 20° is shown in figure 9. Pressure coefficients for pitch, yaw, and roll control deflections are shown along with those for the undeflected fins. Very large tail-findeflection effects can be seen for all three control settings. These are in contrast to the small effects found by adding the undeflected tails to the body-alone configuration as described in the previous section. Tail-fin deflections have very little effect, however, on the leeward pressures.

CONCLUSIONS

A wind tunnel investigation has been performed at Mach 2.50 to obtain detailed body pressure data on two monoplane-wing missile configurations. Test variables included angle of attack, angle of roll, body shape, wing and tail fins, and tail-fin deflections. Based on an analysis of selected data, the following conclusions are drawn:

- 1. Very consistent, systematic trends were observed in the data with changes in angle of attack and in angle of roll, and very good symmetry was found at a roll angle of 0° .
- 2. Body pressures depended strongly on the local body cross-section shape, with very little dependence on the upstream shape.
- 3. Undeflected fins had only a small influence on the pressures on the aft end of the body; however, tail-fin deflections caused large changes in the pressures.

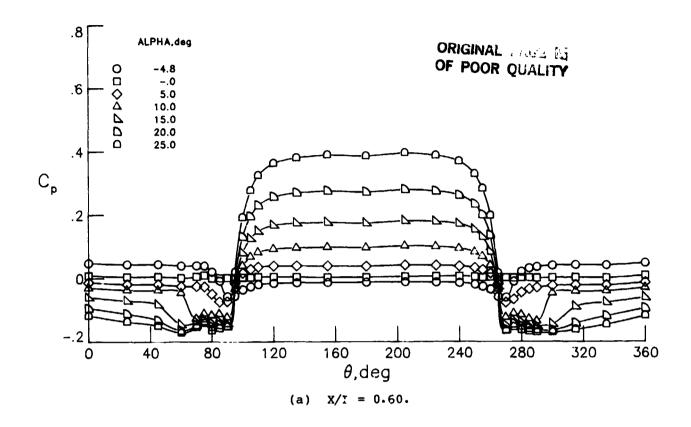
Langley Research Center National Aeronautics and Space Administration Hampton, VA 23665 July 19, 1983

PLOTS OF SELECTED DATA

This appendix contains plots of selected data from the tabulated results so that interested readers can more easily inspect the longitudinal and circumferential pressure distributions on the two configurations. Each plot shows the variation of pressure coefficient around the circumference of the body at a specific longitudinal station for several angles of attack. The volume of plotted data represents about 25 percent of the total amount contained in the tables. The following chart summarizes the test conditions of the plotted data.

Figure	Body	Body shape Configuration		X/L	φ, deg	Tail-fin deflection, deg	
A1	Sharp	nose	Body alone	0.60, 0.95	0		
A2		i	1		22.5		
A3	ŀ	ŀ			45.0		
A4		}			67.5		
A 5		İ	+	 	90.0		
A 6	Į.		Body-tail	0.95	0, 22.5, 45.0	0	
A7		[Body-wing-tail	0.10, 0.95	0	1	
8A	ļ				22.5	1	
A9	1	•			45.0		
A10					67.5		
A11				. ▼	90.0	, •	
A12	,	ł	,	0.95	0	^a 30	
A13	Blunt	nose	Body alone	0.10, 0.60, 0.95	0		
A14		6	_		22.5		
A15	ţ	[45.0		
A16	1	i .			67.5		
A17			*	♦	90.0		
A18	j	\	Body-tail	0.95	0, 22.5, 45.0	0	
A19			Body-wing-tail	.95	0, 22.5, 45.0,	0	
	Į.	į į			67.5, 90.0	4	
A20	,	†	Body-wing-tail	.95	0	' ^a 30	

^aDeflections for pitch, yaw, and roll.



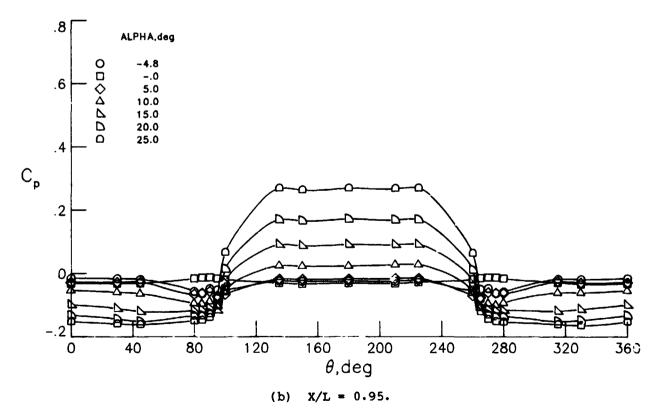
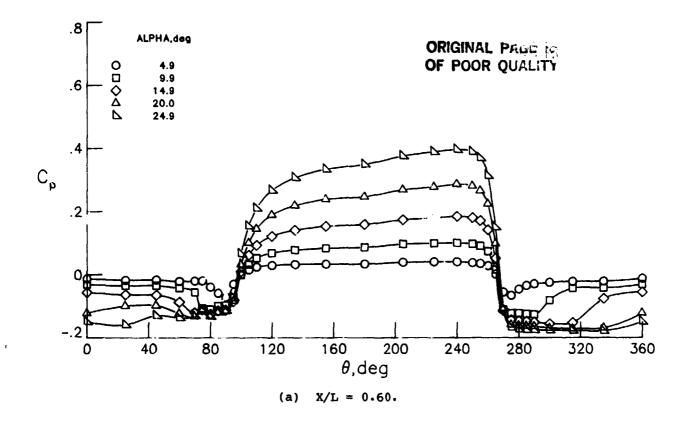


Figure A1.- Body-alone pressure distributions. Sharp-nose body; $\phi = 0^{\circ}$



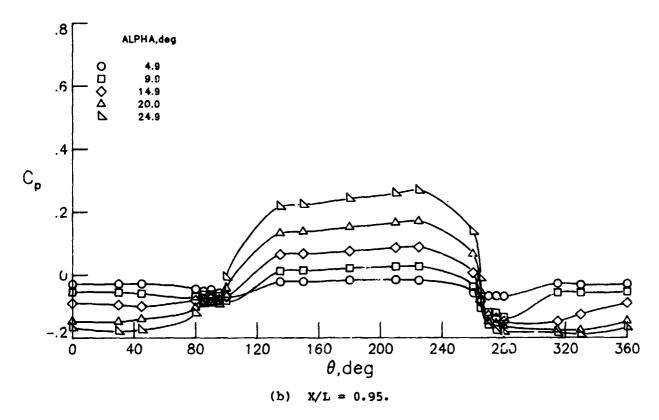
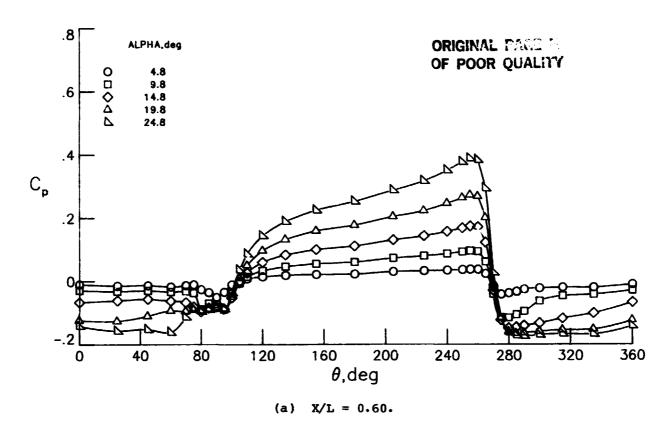


Figure A2.- Body-alone pressure distributions. Sharp-nose body; $\phi = 22.5^{\circ}$.

APPENDIY



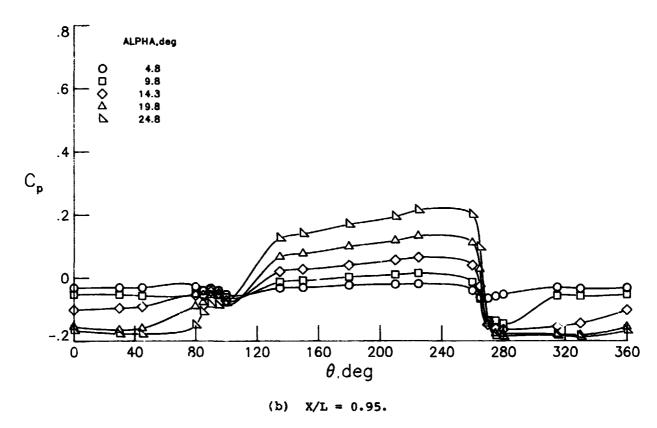
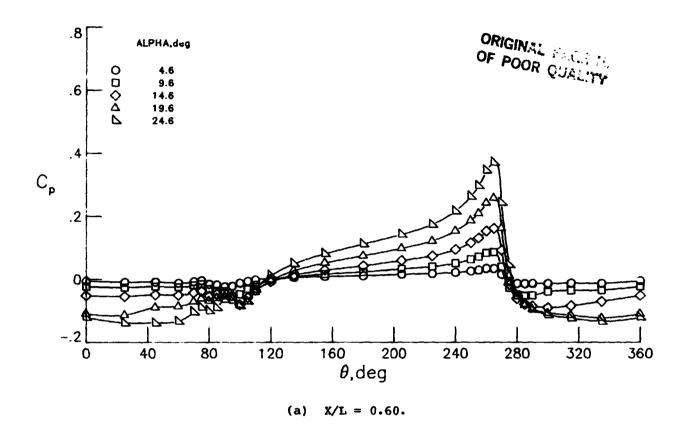


Figure A3.- Body-alone pressure distributions. Sharp-nose body; $\phi = 45.0^{\circ}$



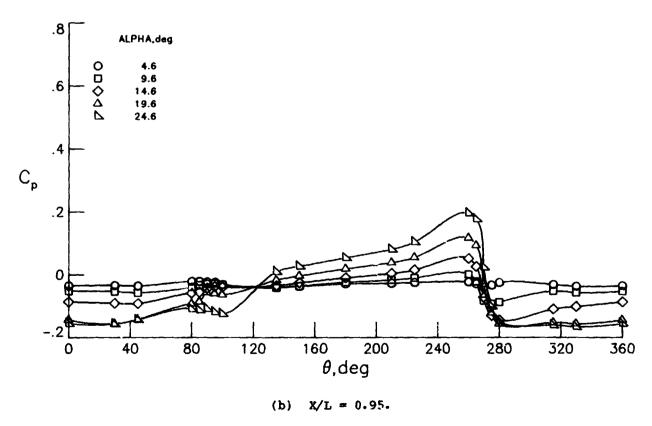
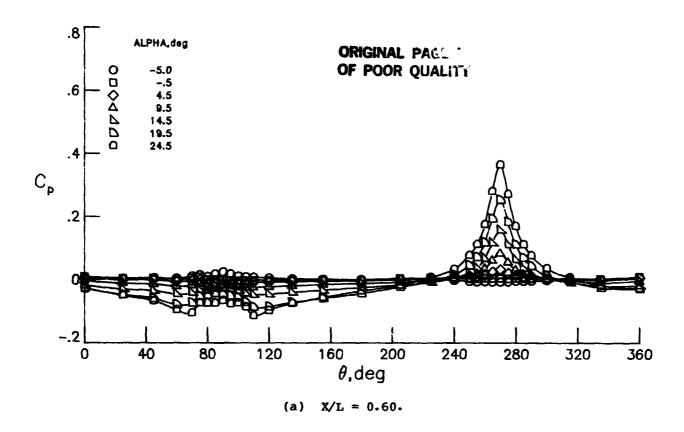


Figure A4.- Body-alone pressure distributions. Sharp-nose body; $\phi = 67.5^{\circ}$.



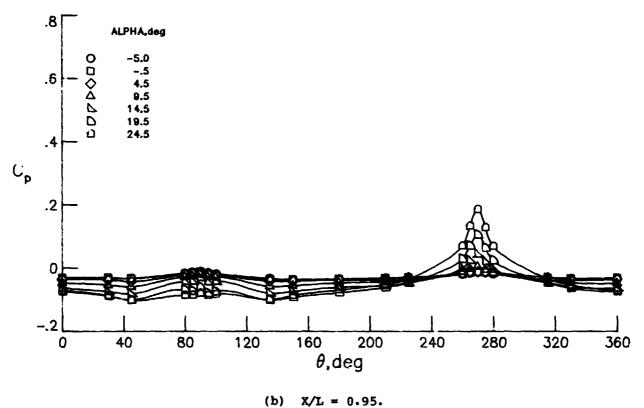
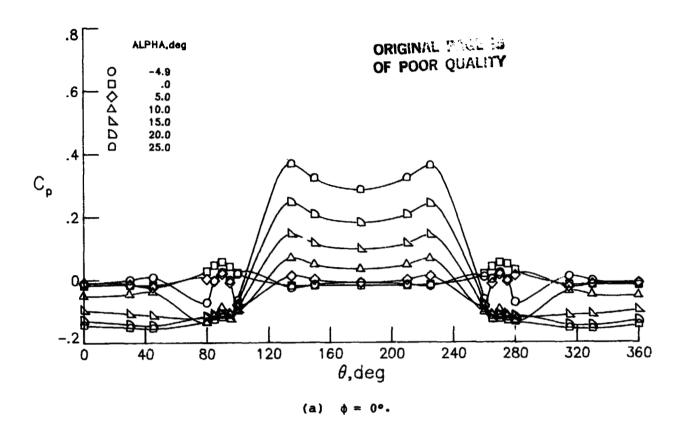


Figure A5.- Body-alone pressure distributions. Sharp-nose body; ϕ = 90.0°.



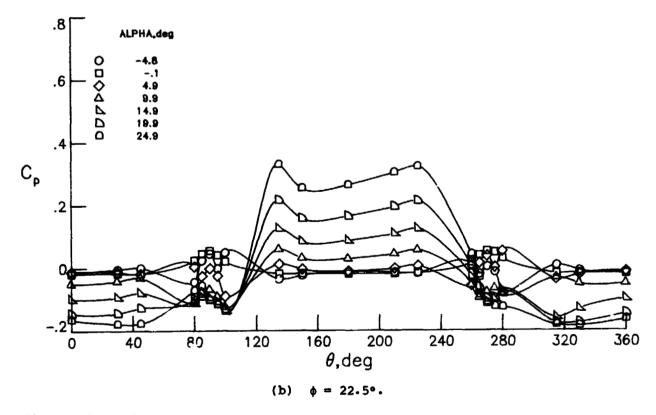


Figure A6.- Body pressure distributions for body-tail configuration. Sharp-nose body; no tail deflections; X/L = 0.95.

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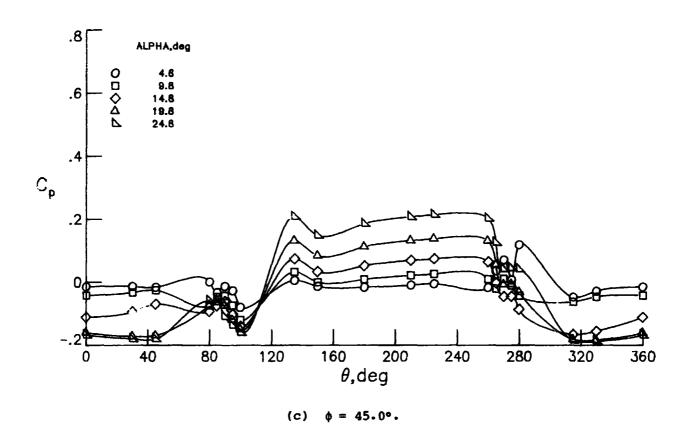
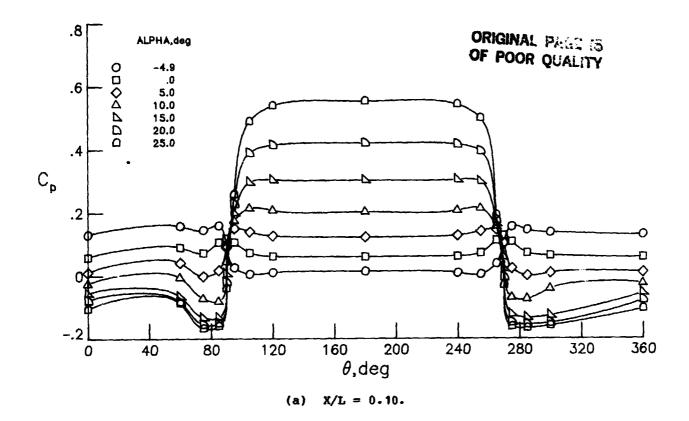


Figure A6.- Concluded.



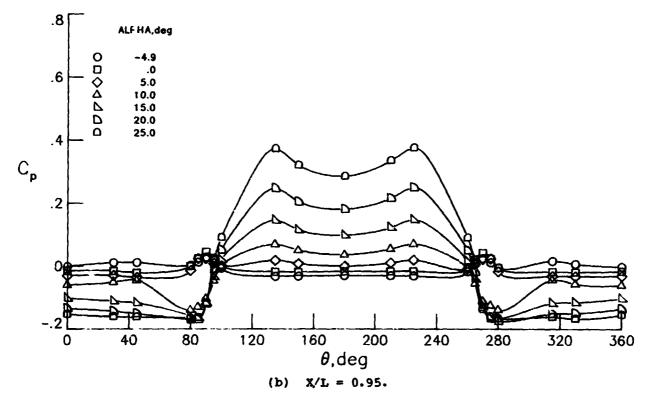
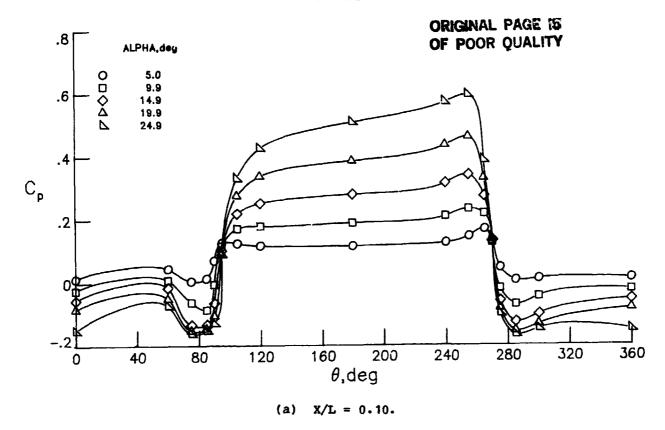


Figure A?.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body; no tail deflections; $\phi = 0^{\circ}$.



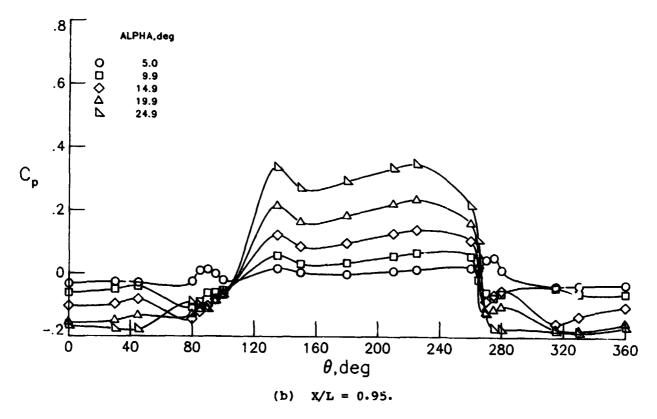
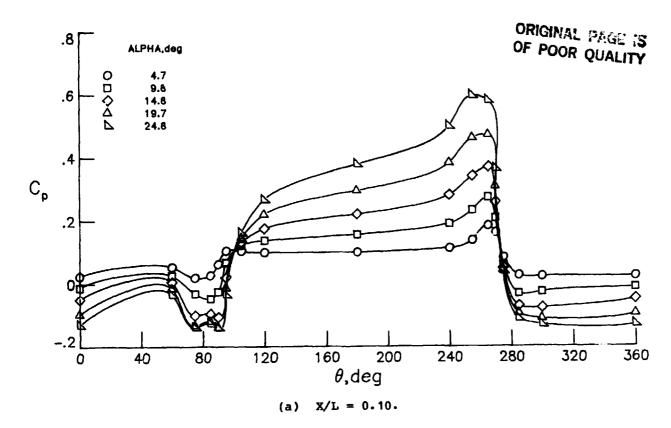


Figure A8.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body; no tail deflections; ϕ = 22.5°.



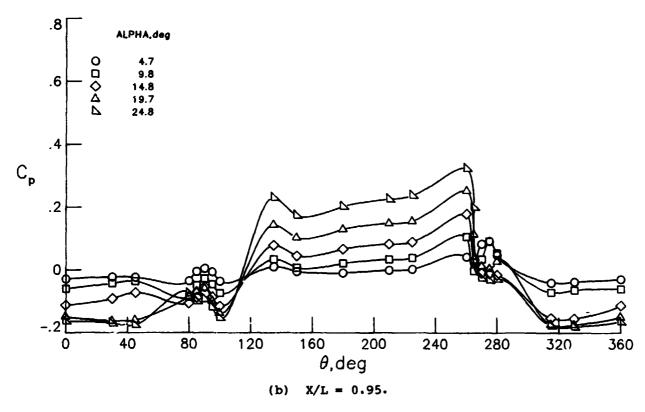
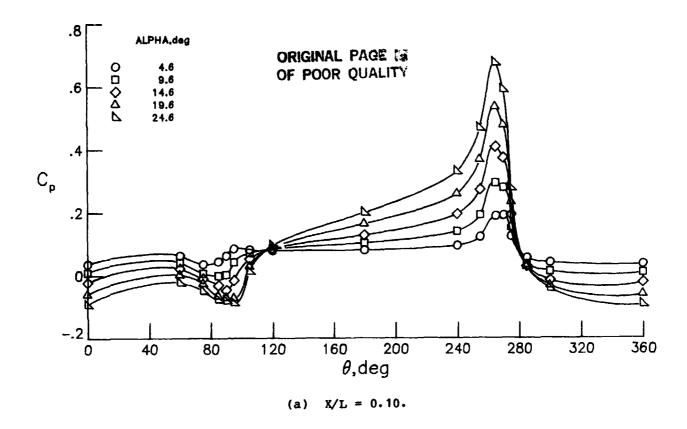


Figure A9.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body; no tail deflections; $\phi \approx 45.0^{\circ}$.



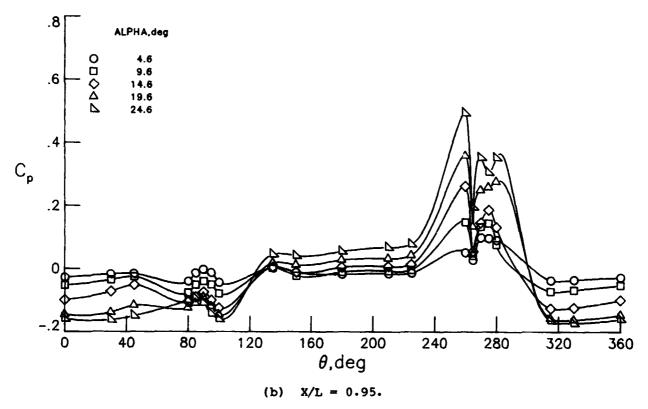
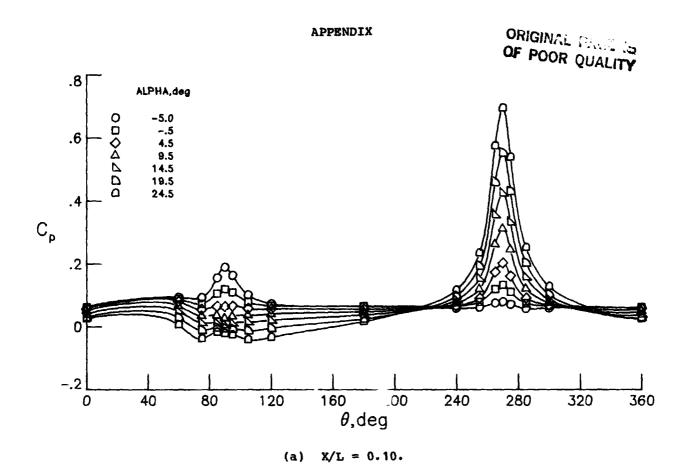


Figure A10.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body; no tail deflections; ϕ = 67.5°.



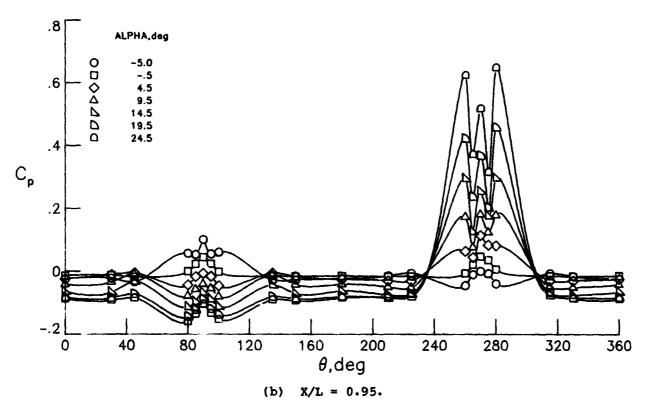
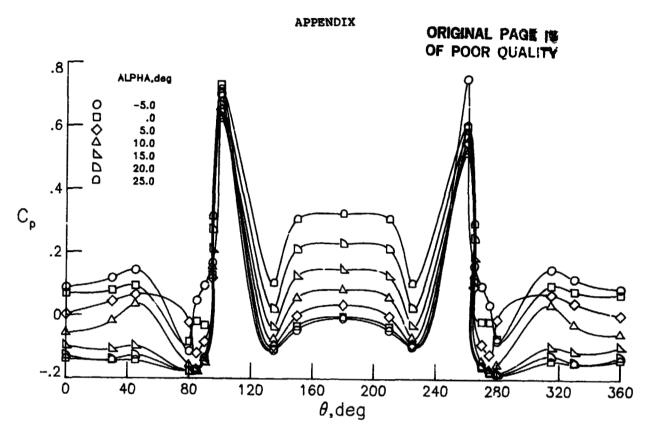


Figure A11.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body; no tail deflections; ϕ = 90.0°.



(a) Pitch deflection, 30°.

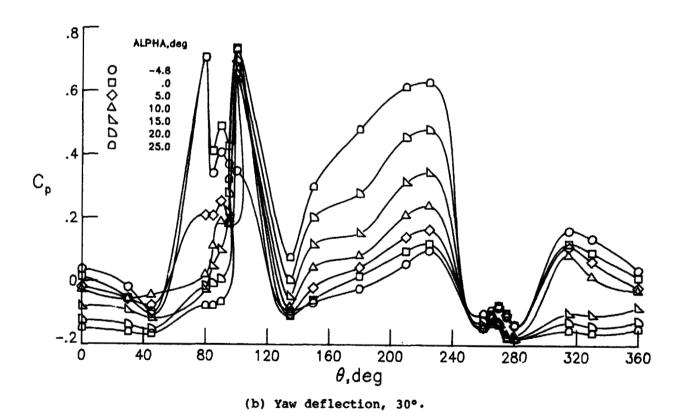
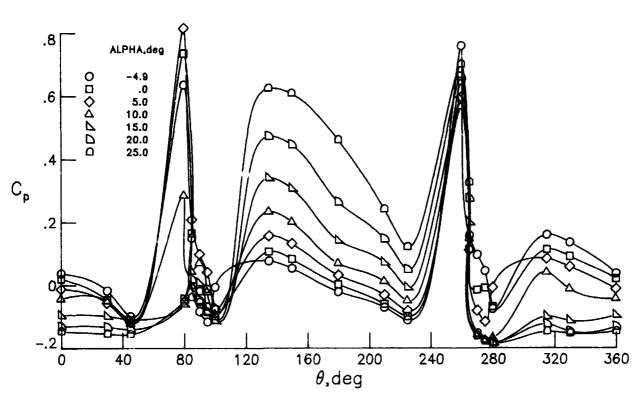


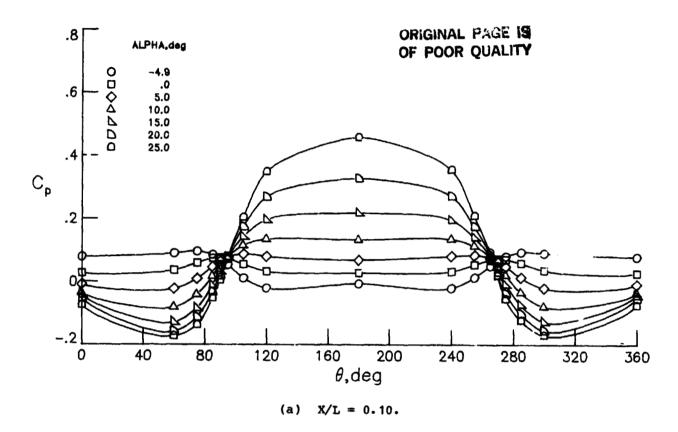
Figure A12.- Body pressure distributions for body-wing-tail configuration. Sharp-nose body: $\phi = 0^{\circ}$; X/L = 0.95.

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(c) Roll deflection, 30°.

Figure A12.- Concluded.



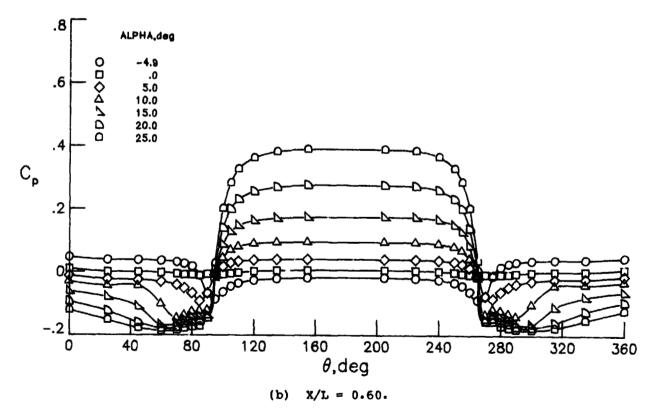


Figure A13.- Body-alone pressure distributions. Blunt-nose body; $\phi = 0^{\circ}$.

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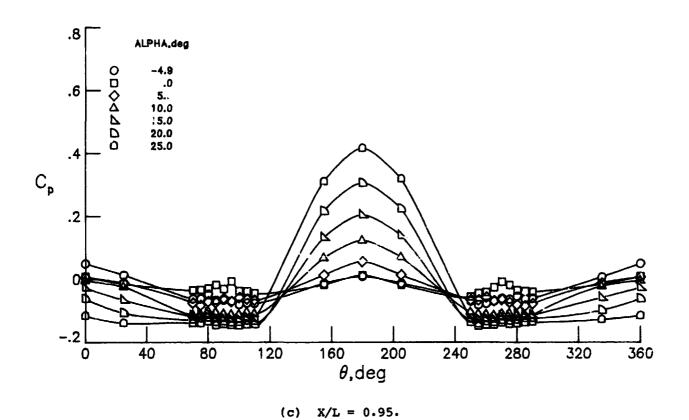
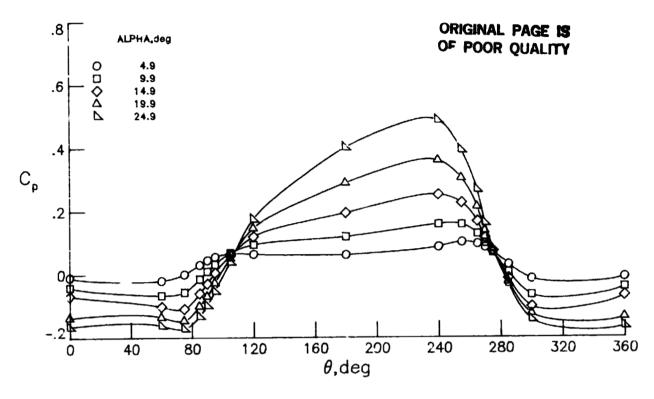
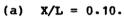


Figure A13. - Concluded.





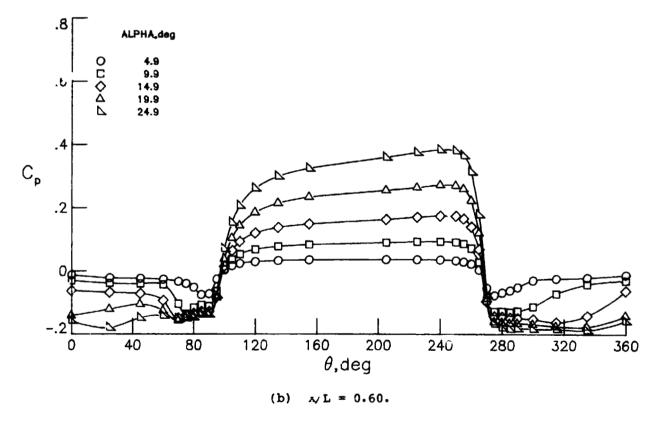


Figure A14.- Body-alone pressure distributi.

the lose body; $\phi = 22.5^{\circ}$.

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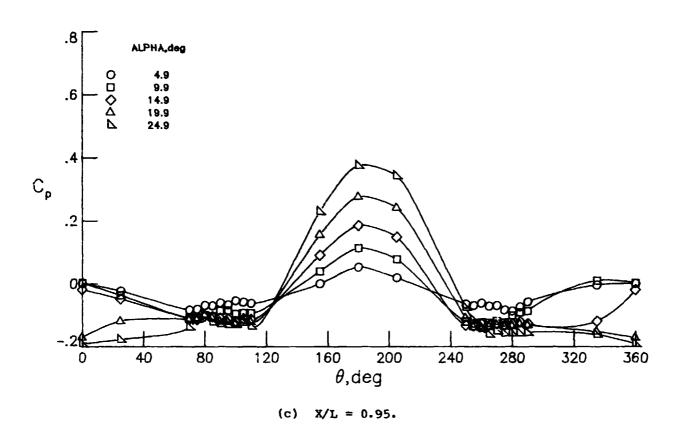
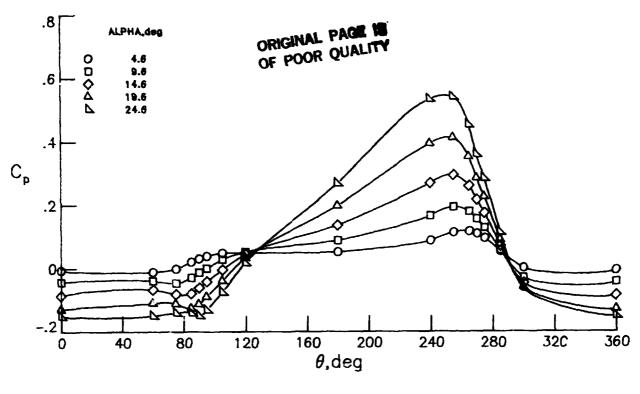
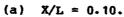


Figure A14.- Concluded.





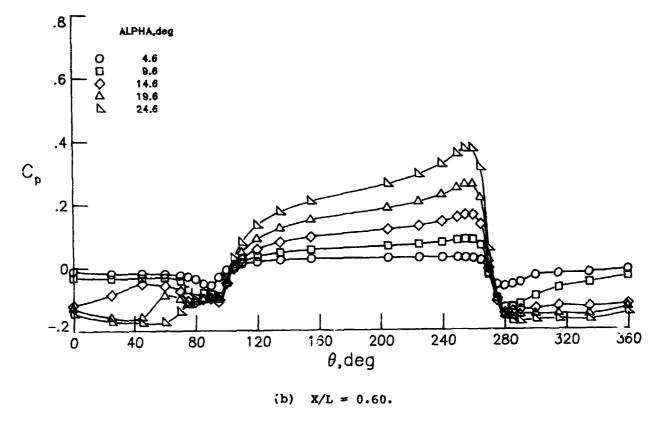


Figure A15.- Body-alone pressure distributions. Blunt-nose body: $\phi = 45.0^{\circ}$

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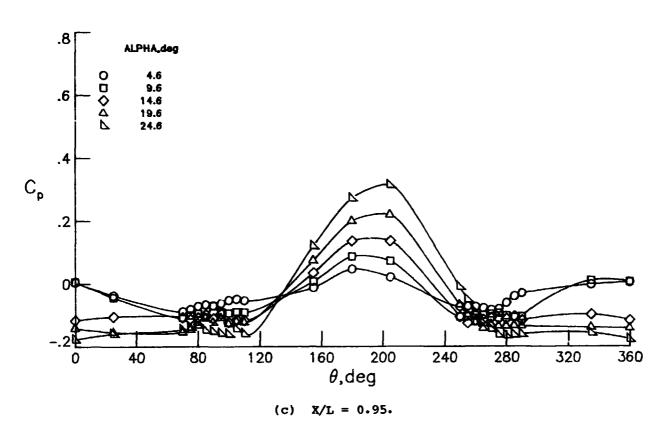
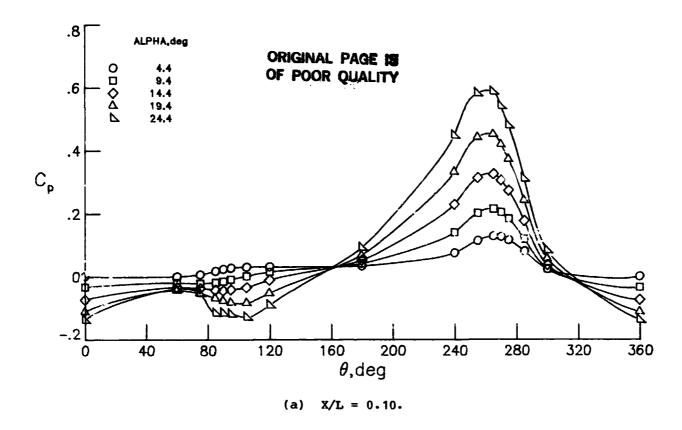


Figure A15.- Concluded.



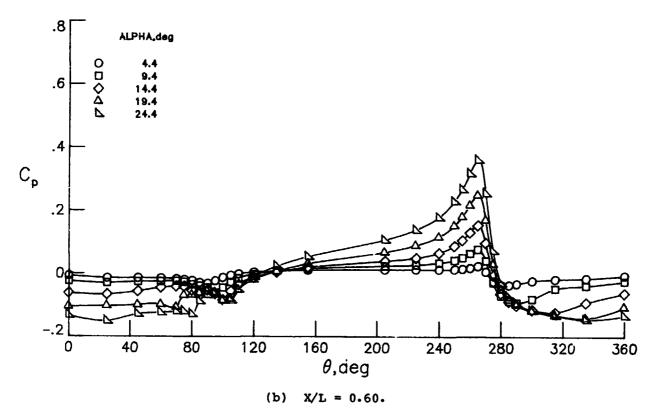


Figure A16.- Body-alone pressure distributions. Blunt-nose body: $\phi = 67.5^{\circ}$

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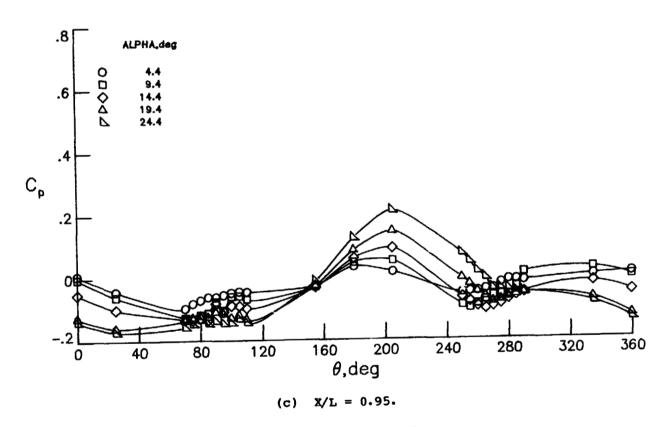
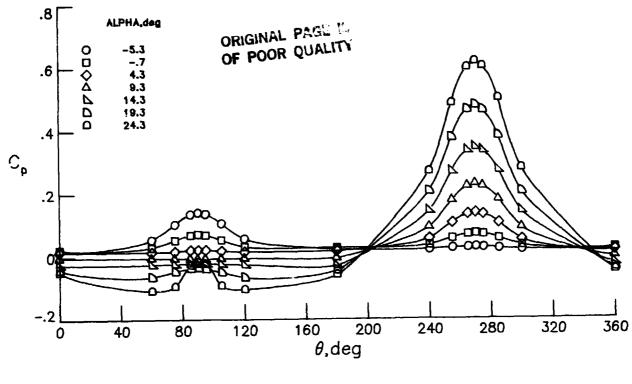
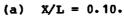


Figure A16.- Concluded.





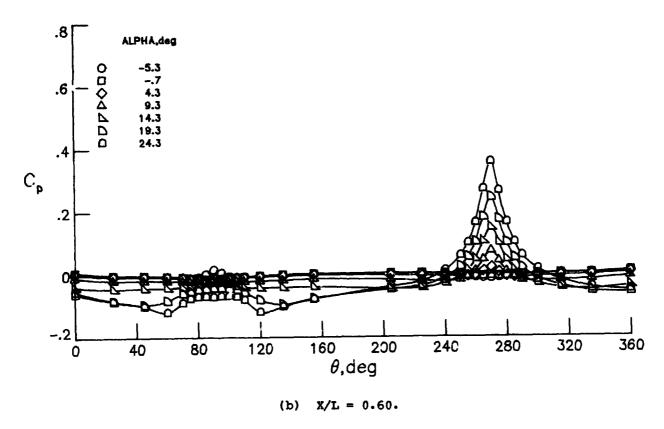


Figure A17.- Body-alone pressure distributions. Blunt-nose body; $\phi = 90.0^{\circ}$.

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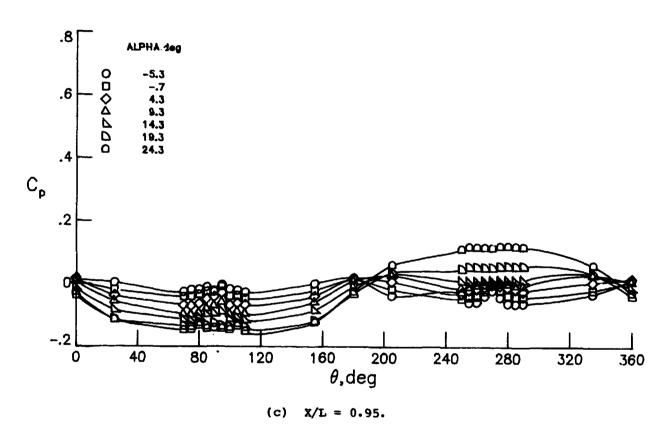
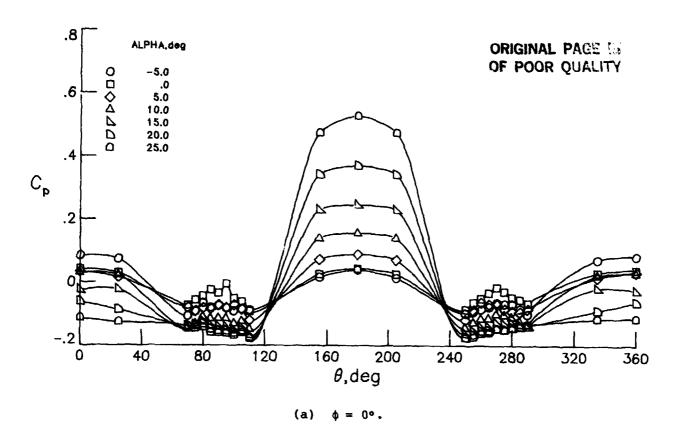


Figure A17.- Concluded.



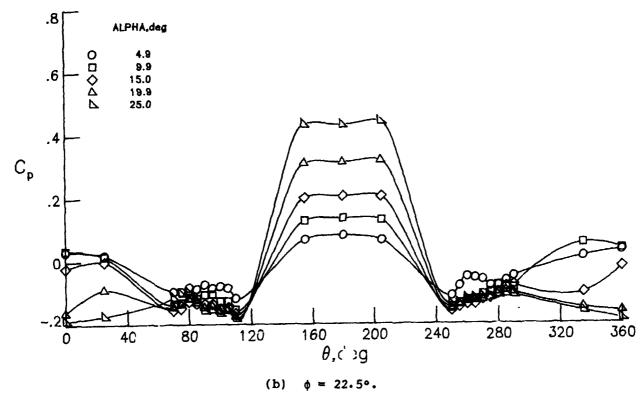


Figure A18.- Body pressure distributions for body-tail configuration. Blunt-nose body; no tail deflections; X/L = 0.95.

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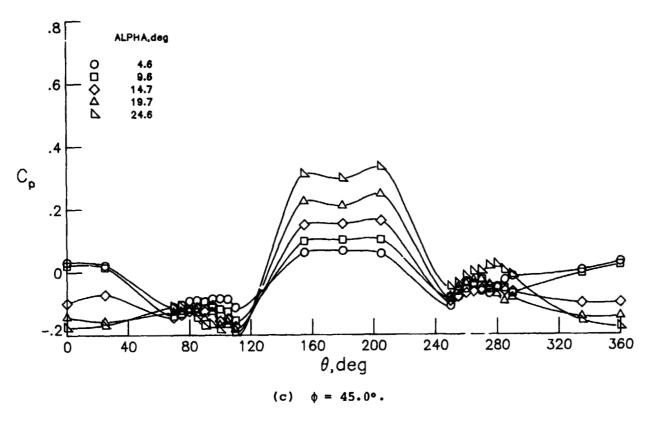
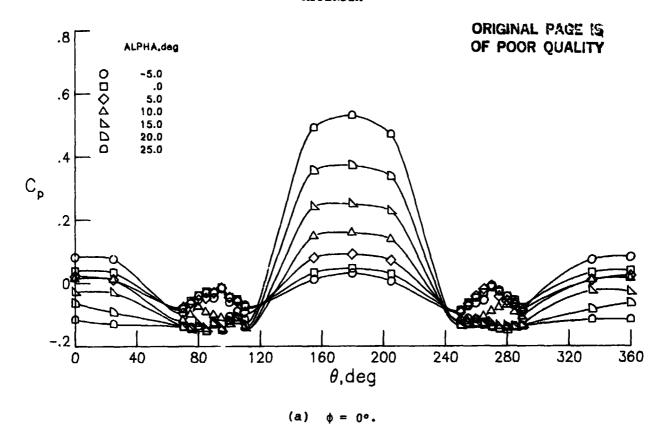


Figure A18.- Concluded.



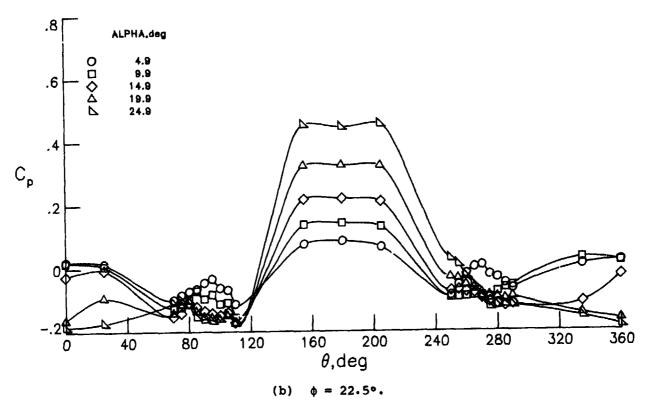
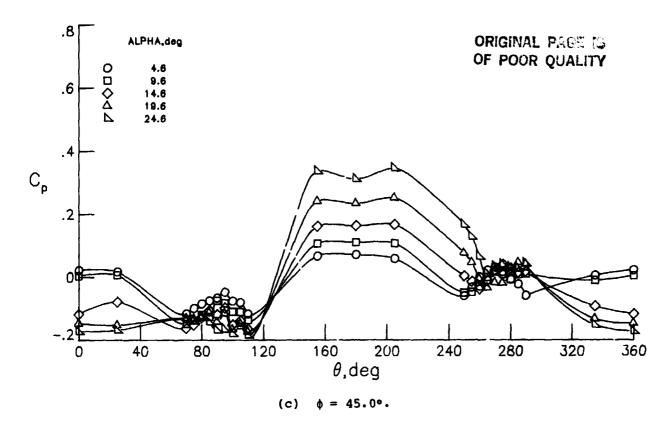


Figure A19.- Body pressure distributions for body-wing-tail configuration. Blunt-nose body; no tail deflections; X/L = 0.95.



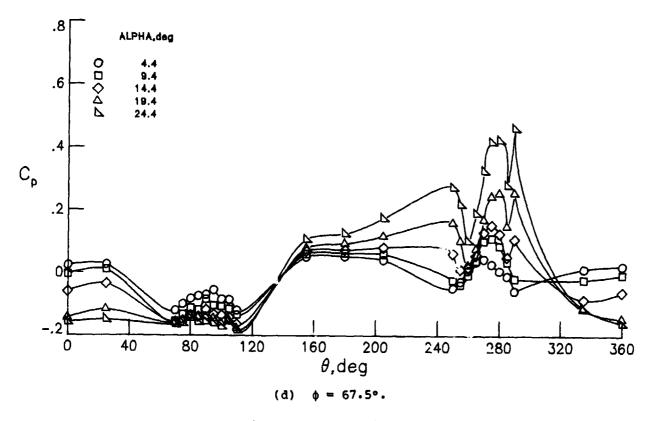


Figure A19.- Continued.

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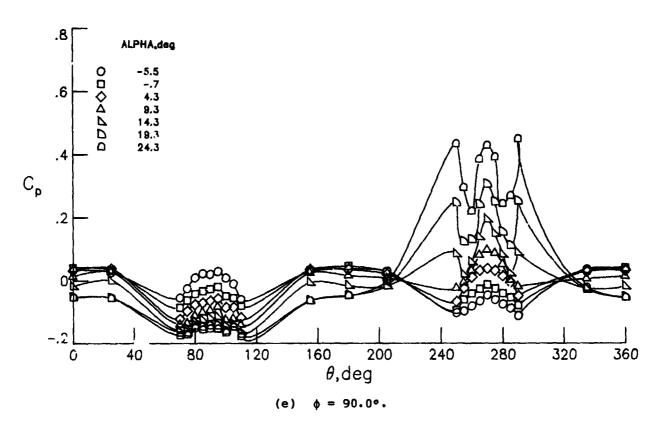
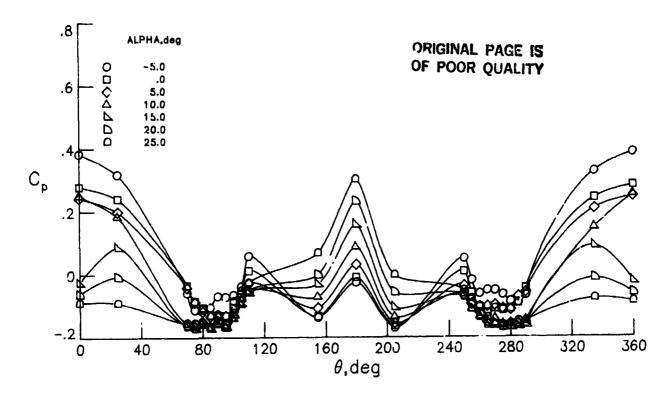


Figure A19.- Concluded.



(a) Pitch deflection, 30°.

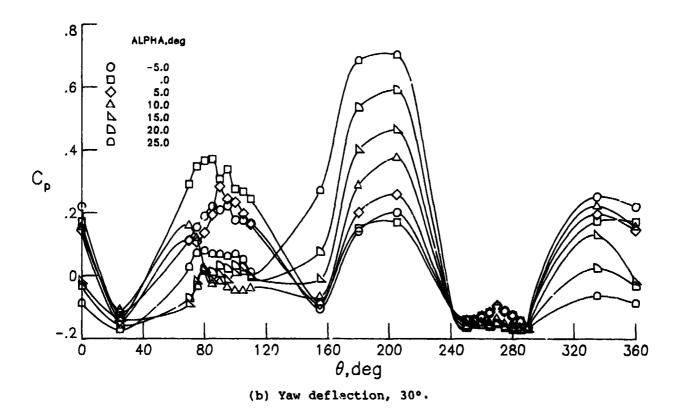
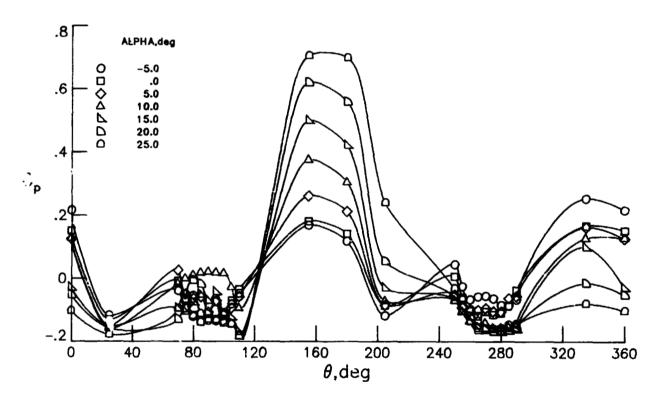


Figure A20.- Body pressure distributions for body-wing-tail configuration. Blunt-nose body; ϕ = 0°; χ/L = 0.95.

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(c) Roll deflection, 30°.

Figure A20.- Concluded.

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- 1. Graves, Ernald B.: Aerodynamic Characteristics of a Monoplanar Missile Concept With Bodies of Circular and Elliptical Cross Sections. NASA TM-74079, 1977.
- Dillenius, Marnix F. E.; and Nielsen, Jack N.: Computer Programs for Calculating Pressure Distributions Including Vortex Effects on Supersonic Monoplane or Cruciform Wing-Body-Tail Combinations With Round or Elliptical Bodies. NASA CR-3122, 1979.
- 3. Graves, Ernald B.; and Fournier, Roger H.: Effect of Nose Bluntness and Afterbody Shape on Aerodynamic Characteristics of a Monoplanar Missile Concept With Bodies of Circular and Elliptical Cross Sections at a Mach Number of 2.50. NASA TM-80055, 1979.
- 4. Jackson, Charlie M., Jr.; Corlett, William A.; and Monta, William J.: Description and Calibration of the Langley Unitary Plan Wind Tunnel. NASA TP-1905, 1981.

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TABLE 1.- PRESSURE COEFFICIENTS FOR SHARP-NOSE MODEL

(a) Body-alone conguration

			ALPHA	-4.77,	PHI	0.0, 800	Y ALONE			
THETA					CP AT I	L.				THETA
066	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	-132	.105	.091	.072	.064	.049	.012	012	015	0
25			.089			.044				25
30									015	30
45			.109			.045			018	45
60	.153	.110	.094	.071	.060		.008	016		60
70			.092			.041				70
75	.149	.116	.100	.072	.050		008	048		75
60			.091			.021			057	80
85	.164	.114	.077	.050	-026		057	083	063	65
90	.103	.063	.028	005	028				047	90
95	.032	.000	022	034	046		074	074	052	95
100			015			035			052	120
105	.010	.006	005	013	009	026	037	040		105
110			.000			019				110
120	.014	.008	.007	004	007	015	036	034		120
135			.009			014			023	135
150									024	150
155			.010			012				155.
180	.019	.012	.010	.002	004	012	029	037	024	180
205			.007			011				205
210									024	210
225			.012			012			021	225
240	.013	.007	.003	001	005		033	035		240
250			.001			019				250
255	.008	005	008	010	016	025	044	040		255
260			016			034			052	260
265	.043	005	026	037	046		074	069	050	265
270	.107	.054	.023	005	034				047	270
275	.158	.139	.092	.054	-026	010	061	084	063	275
280			.105			.021			058	280
295	.148	.112	.095	.073	.056	.031	010	042		285
29 0			.093			.036				290
300	.140	.107	.093	.079	•062	.040	.008	010		300
315			.093			.042			017	315
33C									018	330
335			.096			.042				335

			ALPHA =	01,	PHI = 0.0,	8004	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	.064	.044	.032	.023	.016	.009	021	033	031	0
25			.031			•005				25
30									031	30
45			.055			.006			030	45
60	.085	.046	.037	.021	.015	.002	024	034		60
70			.035			.006				70
75	.077	.053	.046	.025	.021	.010	027	036		75
80			.042			•000			016	80
85	.110	.078	.052	.035	.023	.002	031	024	012	85
90	.122	.090	.069	.040	.022	.002			011	90
95	.110	.075	.053	.034	.018	-002	030	026	015	95
100			.044			.003			019	100
105	.077	.060	.041	.028	.023	.003	018	033		105
110			.038			.005				110
120	.064	.045	.038	.024	.014	.005	020	033		120
135			.037			.004			030	135
150									033	150
155			.035			.004				155
180	.063	.043	.035	.024	.015	.004	015	034	031	100
205			.033			.096				205
210									031	210
225			.038			.007			028	225
2÷0	.064	- 045	.033	.025	.018	.007	019	035		240
250			.037			.005				250
255	.075	.052	.036	.028	.017	.004	026	033		255
260			.042			.005			018	260
265	.115	.073	.051	.033	.021	.003	032	029	014	265
270	.131	.086	.063	.039	-024	.002			013	270
275	.112	.073	.059	.037	•021	.001	030	028	013	275
280			.059			.002			016	280
285	.077	.050	.042	.027	.016	.002	028	033		285
290			.036			.001				290
300	.068	.046	.035	.030	.015	.002	023	035		300
315			.033			.003			029	315
330									034	330
335			.037			.002				335

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			ALPHA =	4.99,	PHI - 0.0	. 8004	ALONE			
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THE TA
0	.011	•002	004	009	013	013	037	041	028	0
25			004			019			027	25 30
30 45			.021			019		039	027	45 60
60 70	.029	001	003 013	015	017	025 025	042	038		70
75	001	012	007	025	023	026 049	054	053	065	75 80
8C 85	.017	011	028 036	050	058	073	094	080	061	85
90 95	.091 .150	.046	.018 .070	019 .041	043 .017	072 015	070	097	056 071	90 95
100			.085			.017	007	043	066	100 105
105 110	.140	.117	.087 .086	.069	.058	,029 .036				110
120	.125	.099	.089	.070	.056	.040	.004	017	018	120 135
135 150									018	150
155 180	.120	.096	.088 .088	.070	.058	.040 .038	-014	008	017	155 180
205	••••	••••	.087			.042			016	2 05 210
210 225			.092			-041			015	1.75
24 <i>0</i> 250	.127	.095	.087 .090	•072	.059	.039	.007	020		27
255	-140	.099	.087	.071	.051	.028	012	044		255
260 265	.144	.089	.084 .062	.038	.012	.016 018	074	095	070 076	260 265
270	.100	.040	•012	018	051	076		- 004	060	270
275 280	.022	017	027 010	043	060	066 044	087	084	061 063	275 280
285	.001	017	015	023	027	034 029	053	047		285 290
290 300	.010	002	012 006	005	017	024	041	039		300
315			005			021			025 025	315 330
330 335			.002			022			•••	335
THE TA			ALPHA .	10.02,	PHI = 0.0	. BODY	ALONE			
DEG			ALPHA .	10.02,	PHI = 0.0	. 900Y	ALONE			THETA
	0.10	0.20	0.30	0.40		0.60	0.70	0.85	0.95	THE TA DEG
0 25	0.10	0.20 027	0.30		CP AT X/L=	0.60		0.85	0.95	DEG
25 30			0.30 029 031	0.40	CP AT X/L= 0.50	0.60 030 037	0.70		053 059	DEG 0 25 30
25			0.30	0.40	CP AT X/L= 0.50	0.60	0.70		053	DEG 0 25
25 30 45 60 70	025	027	0.30 029 031 004 035 112	0.40	CP AT X/L= 0.50 032	0.60 030 037 037 045 126	0.70 055	058	053 059	DEG 0 25 30 45 60 70
25 30 45 60 70 75 80	025 021 073	027 037 094	0.30 029 031 004 035 112 096 114	0.40 032 043 115	CP AT X/L= 0.50032039114	0.60 030 037 037 045 126 111 116	0.70 055 066 141	058 071 110	053 059 063	DEG 0 25 30 45 60 70 75 80
25 30 45 60 70 75 80 85	025 021 073 083	027 037 094 112	0.30 029 031 004 035 112 096 114	0.40 032 043 115	CP AT X/L- 0.50 032 039 114 111	0.60 030 037 037 045 126	0.70 055	058	053 059 063 094 095	DEG 0 25 30 45 60 70 75 80 85
25 30 45 60 70 75 80 85 90	025 021 073	027 037 094	0.30029031004035112096114124052	0.40 032 043 115	CP AT X/L= 0.50032039114	0.60030037045126111116112122	0.70 055 066 141	058 071 110	053 059 063 094 095 088 101	DEG 0 25 30 45 60 70 75 80 85 90
25 30 45 60 70 75 80 85 90	025 021 073 083	027 037 094 112 017	0.30 029 031 004 035 112 096 114 052	0.40 032 043 115 115	CP AT x/L= 0.50032039114111115	0.60 030 037 037 045 126 111 116	0.70 055 066 141 120	058 071 110 109	053 059 063 094 095 088	DEG 0 25 30 45 60 70 75 80 85
25 30 45 60 70 75 85 90 95 100 105	025 021 073 083 .044 .177	027 037 094 112 017 118	0.30029031004035112096114124052 .068 .121 .140 .146	0.40 032 043 115 115 093 .029	CP AT x/L= 0.50032039114111115 .005	0.60030037045126111116112022 .040 .069	0.70 055 066 141 120 091	058 071 110 109 121 019	053 059 063 094 095 088 101	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105
25 30 45 60 70 75 80 85 90 95 100 110 123	021 073 083 .044 .177	027 037 094 112 017	0.30029031004035112096114124052 .008121140	0.40 032 043 115 115 093	CP AT x/L= 0.50032039114111115 .005	0.60 030 037 045 126 111 112 122 032 .040	0.70 055 066 141 120 091	058 071 110 109 121	053 059 063 094 095 088 101 060	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110 120 135
25 30 45 60 70 75 80 85 95 100 110 120 135	025 021 073 083 .044 .177	027 037 094 112 017 118	0.30029031004035112096114124052 .068 .121 .140 .146 .150 .150	0.40 032 043 115 115 093 .029	CP AT x/L= 0.50032039114111115 .005	0.60030037037045116116112122032 .040 .069 .093	0.70 055 066 141 120 091	058 071 110 109 121 019	053 059 003 094 095 088 101	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135
25 30 45 60 70 80 80 95 100 110 120 150 150	025 021 073 083 .044 .177	027 037 094 112 017 118	0.30029031004035112096114124052 .068121140150150	0.40 032 043 115 115 093 .029	CP AT x/L= 0.50032039114111115 .005	0.60030037045126111116112032 .040 .069 .093 .097	0.70 055 066 141 120 091	058 071 110 109 121 019	053 059 063 094 095 088 101 060	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 155
25 30 40 75 80 90 90 105 110 135 155 180 205	025 021 073 083 .044 .177 .217	027037094112017118181	0.30029031004035112096114124052 .068 .121 .140 .146 .150 .150	0.40 032 043 115 115 093 .029 .116	CP AT x/L= 0.50032039114111115 .005 .101 .114	0.60030037045126111116122032 .040 .069 .093	0.70 055 066 141 120 091 .027	058071110109121019 .021	053 059 063 095 095 088 101 060	DEG 0 25 30 45 60 75 80 95 90 95 100 105 110 120 135 150 150
25 30 45 60 75 85 90 100 120 135 135 136 205 225	025 021 073 083 .044 .177 .217 .210	027037094112017 .118 .181 .182	0.30029031004035112006114124052 .068 .121 .140 .150 .150 .150	0.40 032 043 115 115 093 .029 .116 .130	CP AT x/L- 0.50032039114111115 .005 .101 .114	0.60030037037045112115112122032 .040 .069 .093 .097 .103	0.70 055 066 141 120 091 .027 .055	058071110109121019 .021	053 059 063 094 095 088 101 060	DEG 0 25 30 45 60 70 75 85 90 105 110 120 135 150 155 180 205 210 225
25 30 45 60 70 75 80 90 105 110 125 135 180 205 225 225 225 225	025021073083 .044 .177 .217 .210	027037094112017118 .181 .182	0.30029031004035112006114124052 .008121 .140 .146 .150 .150 .151	0.40 032 043 115 093 .029 .116 .130	CP AT x/L- 0.50032039114111115005101114123	0.60030037045126111116112032040069093097103	0.70 055 066 141 120 091 .027 .055	058 071110109121019 .021	053 059 063 095 088 101 060	DEG 0 25 30 45 60 70 70 75 80 95 100 105 110 120 135 150 150 205 210 225 240 250
25 30 45 60 75 80 90 90 105 113 135 135 155 210 240 255	025 021 073 083 .044 .177 .217 .210	027037094112017 .118 .181 .182	0.30029031004035112096114052068121140150150150150151	0.40 032 043 115 115 093 .029 .116 .130	CP AT x/L- 0.50032039114111115 .005 .101 .114	0.60030037037045111116122040 .069 .093 .097 .103	0.70 055 066 141 120 091 .027 .055	058071110109121019 .021	053 059 003 094 095 088 101 060	DEG 0 25 30 45 60 77 70 75 80 85 90 105 110 120 135 150 159 180 205 710 225 240 255
25 30 45 60 75 85 90 100 120 135 155 125 210 255 240 255 265	025021073083 .044 .177 .217 .210 .205	027037094112017118 .181 .182 .183	0.30029031004035112006114124052068121140146150150151152152152152153152153	0.40032043115015093 .029 .116 .130 .136 .129 .113	CP AT x/L- 0.50032039114111115005101114123121099002	0.60030037045126111116112032 .040 .069 .093 .097 .103 .101 .095 .083 .070	0.70 055 066 141 120 091 .027 .055	058 071110109121019 .021	053 059 063 094 095 088 101 060 025 .024 .024 .028	DEG 0 25 30 45 60 77 70 75 80 85 90 105 110 120 125 150 155 160 205 210 225 240 255 260 265
25 30 60 75 80 90 90 105 1135 1135 1205 210 225 240 2505 260 260 260	025021073083 .044 .177 .217 .210 .205	027037094112017118 .181 .182 .183	0.30029031004035112096114124052 .008121140146150150150150151152152152152152152152152	0.40032043115115093 .029 .116 .130 .136	CP AT x/L- 0.50032039114111115 .005 .101 .114 .123 .121 .099	0.60030037045126111116112122032 .040 .063 .093 .097 .103 .101 .005 .083 .070	0.70055066141120091 .027 .055	058 071110109121019 .021 .036	053 059 063 095 095 088 101 060 025 .024 .028 .028	DEG 0 25 30 45 60 70 75 80 90 95 100 105 110 120 135 150 205 210 225 240 250 255 260
25 30 45 60 75 80 90 90 105 113 135 135 135 210 240 250 250 270 270 270 270	025021073083 .044 .177 .217 .210 .205 .210 .215 .156 .057071	027037094112017118181182183181174096015110	0.30029031004035112096114124052 .068121140150	0.40032043115115093 .029 .116 .130 .136 .129 .113 .022091108	CP AT x/L- 0.50032039114111115 .005 .101 .114 .123 .121 .099002120119	0.60030037037045111112122032 .040 .069 .093 .097 .103 .101 .095 .083 .070 .0410123111116	0.70055066141120091 .027 .055 .067 .098 .023090118	058 071110109121019 .021 .036 .022019121112	053 059 063 094 095 088 101 060 024 024 028 028	DEG 0 25 30 45 60 77 70 75 80 90 105 110 120 135 150 155 260 275 260 275 278
25 305 600 705 805 909 1005 1100 11505 11505 11505 2050 2050 2	025021073083 .044 .177 .217 .210 .205 -210 .215 .156 .057071	027037094112017118 .181 .182 .183181 .174 .096015110093	0.30029031004035112096114125008121140140150150151152152152152152152152103082103	0.40032043115015093 .029 .116 .130 .136 .129 .113 .022091108	CP AT x/L= 0.50032039114111115005 .101114123121099002120119122	0.60030037045126111116112032040069069097097097003011014034123111116128135	0.70055066141120091 .027 .055 .067 .058 .023090118	058 071110109121019 .021 .036 .022019121112117	053 059 063 095 088 101 060 025 .024 .028 .028	DEG 0 25 30 45 60 77 70 75 80 85 90 105 110 120 135 150 155 260 275 240 255 270 275 280 285
25 30 40 75 80 90 90 105 113 135 135 135 210 240 255 275 285 275 285 290	025021073083 .044 .177 .217 .210 .205 .210 .215 .156 .057071	027037094112017118181182183181174096015110	0.30029031004035112096114124052 .068 .121 .140 .150 .150 .150 .151 .152 .152 .152 .152 .153 .155 .157 .159103 .10591030082103	0.40032043115115093 .029 .116 .130 .136 .129 .113 .022091108	CP AT x/L- 0.50032039114111115 .005 .101 .114 .123 .121 .099002120119	0.60030037037045111116122032040 .009 .003 .007 .009 .009 .003 .007 .103	0.70055066141120091 .027 .055 .067 .098 .023090118	058 071110109121019 .021 .036 .022019121112	053059003094095088101000025024028028108000	DEG 0 25 30 45 60 77 70 75 80 95 100 115 150 120 135 260 275 260 275 270 275 280 285 290 300
25 305 600 705 805 909 1005 1100 11505 11505 11505 2050 2050 2	025021073083 .044 .177 .217 .210 .205 -210 .215 .156 .057071	027037094112017118 .181 .182 .183181 .174 .096015110093	0.30029031004035112096114125008121140140150150151152152152152152152152103082103	0.40032043115015093 .029 .116 .130 .136 .129 .113 .022091108	CP AT x/L= 0.50032039114111115005 .101114123121099002120119122	0.60030037045126111116112032040069069097097097003011014034123111116128135	0.70055066141120091 .027 .055 .067 .058 .023090118	058 071110109121019 .021 .036 .022019121112117	053 059 063 095 088 101 060 025 .024 .028 .028	DEG 0 25 30 45 60 77 70 75 80 85 90 105 110 120 135 150 155 260 275 240 255 270 275 280 285

ORIGINAL PAGE IS OF POOR QUALITY

			ALPHA .	15.02,	PHI - 0.	O. 8004	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	055	052	054	057	064	060	091	095	095	0
25			056			071				25
30									110	30
45			027			083			120	45
60	085	146	147	149	149	146	149	130		60
70			156			137				70
75	133	138	124	142	136	120	155	133		75
80			146			140			117	~ ^
85	133	148	153	140	133	135	144	124	115	65
90	.009	055	075	114	135	142			108	90
95	. 202	.133	.085	.039	.014	-•052	087	116	116	95
100			.177			.001			028	100
105	.300	.252	.215	.181	.160	-126	.075	.026		105
110			.230			.149				110
120	.306	. 267	.245	.211	.193	.168	.120	. 083		120
135			.252			.175			.091	135
150									.086	150
155			.255			.177				155
160	.304	.272	.256	.224	.205	.174	.141	.104	.092	180
205			.258			.182				205
210									.091	210
225			.257			.179			.092	225
240	.305	.268	.248	.213	.197	.172	.128	. 682		240
250			.237			.154				250
255	.299	.245	.220	-184	-156	.131	.074	.025		255
260			.191			.084			031	260
265	.165	-101	.066	.032	.004	025	082	122	121	265
270	.022	049	089	115	143	-,148			112	270
275	122	150	135	133	142	133	141	128	116	275
280			112			136			117	280
285	133	142	143	145	152	151	156	133		285
290			158			152				290
300	126	145	157	139	156	145	150	137		300
315			061			090			119	315
330									113	330
335			048			076				335

			ALPHA	• 20.00,	PHI = 0.0), BODY	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	079	083	089	093	103	095	125	126	132	٥
25			095			112				25
30									144	30
45			088			133			152	45
60	106	161	158	164	164	165	169	156		60
70			168			147				70
75	156	155	135	154	143	135	167	149		75
80			161			153			134	80
85	153	164	167	154	147	147	156	139	133	85
90	018	075	089	126	143	151			125	90
95	.230	.159	.106	.059	.036	004	071	099	191	95
100			.238			.131			.015	100
105	.392	.340	. Z96	.261	.236	.196	.139	.083		105
110			• 320			.230				110
120	.415	.377	. 343	.313	.287	.257	•201	.158		120
135			.353			.270			.170	135
150									.167	150
155			.356			.276				155
100	•420	.389	.359	.337	.304	.272	•233	-187	.172	180
205			.359			.280				205
210									.170	210
225			.356			.275			.170	225
240	- 416	. 375	.3(5	.324	.292	• 2 6 2	.213	.156		240
250			.327			.234				250
255	• 394	• 331	.299	.273	.233	.201	.139	.083		255
260			• 240			-136			.011	260
265	.175	.116	.001	.035	•022	007	065	107	106	265
270	007	073	108	129	152	163			130	270
275	149	165	146	146	159	145	153	144	136	275
280			122			152			137	280
285	155	160	157	156	159	159	169	148		285
290			173			163				290
300	150	161	173	148	172	165	172	156		300
315			-,144			142			151	315
330									148	330
335			087			119				335

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Continued

			ALPHA	24,99,	PHI . 0.0), 800Y	ALONE			
THE TA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEE
0	105	113	-:124	124	133	118	149	145	152	0
25			133			137				25
30									159	30
45			104			150			161	45
60	112	171	163	169	169	172	177	161		60
70			176			154				70
75	169	163	140	162	150	141	175	161		75
80			169			165			150	80
65	163	171	175	164	158	158	167	151	148	85
90	040	090	097	131	145	151			139	90
95	. 259	.103	.134	.083	.065	.020	047	075	079	95
100			.307			.192			.067	100
105	.490	. 430	.389	.352	.326	.278	.216	. 154		105
110			.426			. 325				110
120	.539	. 491	.460	.431	.401	.363	• 302	. 249		:20
135			.474			.381			.269	135
150									. 264	150
155			.481			. 390				155
160	.552	. 512	.484	.469	.426	.386	. 343	. 285	. 269	160
205			. 485			. 396				205
210									.268	210
225			.479			.388			.270	225
240	.541	. 492	.464	.443	.405	.370	.317	.251		240
250			.435			. 329				250
255	.498	. 426	.395	.368	.376	.284	.219	.155		255
260			.313			.198			.064	260
265	.190	.140	.109	.081	.052	•01c	039	085	081	265
270	032	088	117	133	152	166			145	270
275	163	174	154	156	172	155	165	157	152	275
280			129			164			154	280
285	167	169	166	160	170	169	178	161		285
290			179			171				290
300	160	172	180	~.153	179	172	180	163		300
315			172			162			161	315
330									165	330
335			125			146				335

			ALPHA .	4.94,	PHI - 22.5,	BOOY	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							037	042	028	0
25										25
30									028	30
45									028	45
60							039	037		60
70										70
75							048	046		75
80									045	80
85							075	069	050	85
90									046	90
95							081	081	057	95
100									067	100
105							018	055		105
110										110
120							003	026		120
135									021	135
150									021	150
155										155
180							.011	011	016	1 80
205										205
210									015	210
225									016	223
240							.009	016		240
250										250
255							004	035		255
260									-,057	260
265							053	094	078	265
270									067	270
275							084	088	067	275
280									068	280
205							053	047		285
290										290
300							041	040		300
315									027	315
330									030	330
335										335

ORIGINAL PAOR IS

			ALPHA .	9.92,	PHI = 22.5,	BODY	AL ONE			
THE TA DE G	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THETA DEG
0	****	••••	••••		****		~.055	059	054	0
25 30								• • • •	055	25 30
45							061	068	059	45 60
70										70
75 80							127	111	068	75 80
#5 90							~-110	085	061 061	85 90
95 100							120	068	067	95 100
105 110							007	044		105 110
120 135							.032	•002	.013	120 135
150 155									.015	150 155
190							.059	.028	.022	160
205 210									.027	205 210
225 240							.063	.028	.027	225 240
250 255							.043	000		250 255
260 265							+.05:	102	037 105	260 265
270 275							134	126	118 120	270 275
280									134	280
285 290							142	148		265 290
300 315							092	072	056	300 315
330 335									056	330 335
			ALPHE .	14.95,	PHI • 22.5,	8 0 0 Y	ALONE			
THETA Deg	0.10	0.20	0.30	0.40	CP AT X/L- 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25							084	086	089	a
30									095	25 30
45 60							103	107	100	45 60
70 75							135	106		70 75
80 85							119	094	081 077	80 85
90 95							126	096	074 076	90 95
100 105							.024	014	069	100
110 120										105 110
135							.083	.051	.065	120 135
150 155									.068	150 155
180 205							.126	•090	.076	180 205
210 225									.087	210 225
240 250							.138	.093		240 250
255 260							.110	.056	.007	255
265 270							024	083	.007 084	260 265
275							151	138	130 137	270 275
200 285							159	163	147	280 285
300 300							164	152		290 300
315 330									147 125	315 330
335										335

ORIGINAL PAGE (3)
TABLE 1.- Continued OF POOR QUALITY

				10.04	PHI = 22.5,	a00v	AL DUE			
			ALPHA =	19.96,		BCDA	ALUNE			
THE TA DE G	0.10	0.26	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THETA
0							148	139	146	0 25
30 45									148 140	30 45
60 70							137	135		60 70
75							137	115		75
80 85							123	100	104 087	80 85
90 95							123	105	087 086	90 95
100 105							.067	.026	042	100 105
110 120							.147	.112		110 120
135							•••	••••	.133	135
150 155									.138	150 155
100 205							.212	.167	.152	180 205
210 225									.166 .171	210 225
240							•232	.173		240 250
250 255							.194	.129		255
260 265							.015	053	.067 051	260 265
270 275							164	157	148 155	270 275
580									162	280
285 290							172	167		285 290
300 315							181	173	175	300 315
330 335									176	330 335
THE TA DE G	0.10	0.20	ALPHA 0.30	• 24.94 <i>,</i> 0.40	CP AT X/L=	, 800Y	AL ONE 0.70	0.85	0.95	THET
	0.10	0.20	0.30	0.40	0170	0.00				
25							172	158	167	0 25
30 45									179 174	30 45
60 70							149	151		60 70
75 80							140	125	120	75 80
85							124	100	090	85
90 95							114	110	089 092	90 95
100 105							•119	.074	007	100 105
110							•224	.185		110
135 150							•624	•107	.218 .224	120 135 150
155 180							.311	.259	.243	155 160
205 210									.259	205 210
225 240							.339	.273	-269	225 240
250 255							.292	.216		250 255
260									-136	Z60
265 270							.063	015	010 161	265 270
275 280							179	173	177 181	275 280
285 290							184	178	- · ·	285 290
300							187	179		300
315 330 335									184 189	315 330
										335

ORIGINAL TRUE TO OF POOR QUALITY

			ALPHA -	4.79,		80D4	AL ONE			
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L+ 0.50	0.60	0.70	0.85	0.95	THET A DEG
.0							036	043	031	0
25 30									030	25 30
45 60							035	038	030	45 60
70 75							039	039		70 75
85 85							054	056	027 040	80 85
90 95							076	059	032 038	90 95
170 105									051	100
110							029	063		105 110
120 135 150 155							014	036	031 030	120 135 150 155
180 205							.222	019	023	160
210									020	205 210
225 240							.005	017	019	225 240
250 255							001	028		250 255
265 265							030	069	039 061	260 265
270 275							065	072	064 057	270 275
280 285							050	039	051	280 285
290 300							040	039		290
315 330 335							040	034	029	300 315 330 335
			AL PHA	9.78,), BODY	AL ONE			
THETA DEG	0.10	0.20	ALPHA :	9.78,	CP AT X/L=	0.60	ALONE	0.85	0.55	THETA DEG
0 OEG	0.10	0.20			CP AT X/L=			0.85	0. 5 5 052	DE G O
0 E G 2 5 3 0	0.10	0.20			CP AT X/L=		0.70			0 6 6 2 5 3 0
9EG 0 25	0.10	0.20			CP AT X/L=		0.70		052	0 25 30 45
9EG 0 25 30 45 60 70	0.10	0.20			CP AT X/L=		0.70	058	052 053	DEG 0 25 30 45 60 70
0 E G 25 30 45 60 70 75	0.10	0.20			CP AT X/L=		0.70 054 052 071	058 060 081	052 053 056	DEG 0 25 30 45 60 70 75 80
9EG 0 25 30 45 60 70 75 80 85	0.10	0.20			CP AT X/L=		0.70 054 052 071 063	058 060 081 064	052 053 056 050 039 036	0EG 0 25 30 45 60 70 75 80 85
9E6 0 25 30 45 60 70 75 80 80 95	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094	058 060 081 064 062	052 053 056	DE G 0 25 30 45 60 75 80 85 90 95
9E6 25 30 45 60 70 75 80 85 90 100 105	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094	058 060 081 064 062	052 053 056 050 039 036	DEG 0 29 30 45 60 70 75 80 85 90 91 100
9E6 25 30 45 60 75 80 85 90 100 110 110 120 135	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094	058 060 081 064 062	052 053 056 050 039 036	DE G 0 25 30 45 60 70 75 80 90 100 110 120 135
9E6 25 30 45 60 80 80 80 80 100 105 110 120 135 150	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094	058 060 081 064 062	052 053 056 050 039 036 040 060	DE G 0 23 30 45 60 70 75 80 85 90 100 110 120 135 150 180
9E6 0 25 30 45 60 70 75 80 85 90 100 105 110 120 135 150 155 180 205	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094 036	058 060 081 064 062 070	052 053 056 050 039 036 040 060	DE G 0 25 30 45 60 70 75 80 95 100 110 120 135 155 180 205
9E6 0 25 30 45 60 75 85 90 100 105 110 120 135 150 150 205 210 225	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094 036	058 060 081 064 062 070	052 053 056 050 039 040 060	DE G 0 25 30 45 60 70 75 80 90 95 100 1150 1150 1150 1205 2105 2240
9E6 25 30 45 60 75 80 85 95 100 110 120 135 150 150 205 215	0.10	0.20			CP AT X/L=		0.70 054 052 071 093 094 036	058060081064062070025	052 053 056 050 039 036 040 060	DE G 0 23 30 45 60 70 75 80 90 100 110 120 135 150 150 205 210
0 E G 25 30 45 60 75 80 90 105 110 125 120 135 150 1205 220 250 250	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094 036 .001	058060081064062070025	052053056050039036040060012008 .003	DE G 0 25 30 45 60 70 75 80 90 90 105 1105 1150 1205 2250 2250 2560
9E6 25 30 45 60 75 85 90 100 110 120 135 150 150 205 210 225 240 255 260 267	0.10	0.20			CP AT X/L=		0.70 054 052 071 063 094 036 .001 .035	058 060081064062070025 .007	052053056050039036040060012008 .003 .011 .015	DE G 0 25 30 45 60 77 80 75 80 90 100 110 1150 1150 1205 210 225 240 250 260 270
9E6 25 30 45 60 75 80 85 95 100 120 135 150 150 205 225 240 255 265 275 280	0.10	0.20			CP AT X/L=		0.70054052071063094036 .001 .035	058060081064062070025 .007 .019 .000065	052053056050030030040060012008 .003 .011 .015	DE G 25 30 45 60 75 85 90 100 120 135 1205 225 240 255 265 270 275 280
9E6 25 30 45 60 77 80 85 90 100 110 120 135 150 225 240 225 240 275 280 280	0.10	0.20			CP AT X/L=		0.70054052071063094036 .001 .035 .050 .046008140131	058 060081064062070025007025019065143149	052053056050039036040060012008 .003 .011 .015	DE G 230 455 670 750 805 905 1005 11205 1250 2250 2250 2250 2250 2
9EG 25 30 45 60 75 80 70 75 80 100 105 110 135 150 150 210 250 210 250 2670 275 285	0.10	0.20			CP AT X/L=		0.70054052071063094036 .001 .035	058060081064062070025 .007 .019 .000065	052053056050039036040060012008 .003 .011 .015	DE G 0 25 30 45 60 70 75 80 90 105 1150 120 1255 1205 2250 2250 2257 2260 2275 2285

(a) Continued

ORIGINAL FAGE (S) OF POOR QUALITY

			ALPHA	· 14.80,	PHI - 45.0,	9004	ALONE			
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.65	0.95	THE TA
0							092	092	101	0
25 30									095	25 30
45 60							084	091	090	45 60
70 75							108	093		70 75
80 85							090	073	055 055	80 85
90 95							091	067	042 049	90 95
100									071	100
105 110							031	062		105 110
120 135 150 155							.027	.001	.021	120 135 150 155
180							.082	.051	.041	180
205 210									.057	205 210
225 240							.115	.075	.065	225 240
250 255							.117	.067		250 255
260 265							.040	028	.041 026	260 265
270									148	270
275 280							154	159	159 163	275 280
285 290							159	164		285 290
300 315 330 335							147	148	153 143	300 315 330 335
			ALPHA •	19.76,	PHI = 45.0,	8004	ALONE			THETA
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L+ 0.50	0.60	0.70	0.85	0.95	DEG
0 25							148	141	154	0 25
30 45									165 159	30 45
60 70							120	-,137		60 70
75 60							116	102	090	75 80
85 90							097	083	077 054	85 90
95							093	074	056	95 100
100 105							011	043	080	105
110 120							.064	.039		120
135 150									.067 .078	135 1°0
155 180							.145	.108	.100	155 180
205									.119	205 210
210 225							104	147	.133	225 240
240 250							.196	.147		250
255 260							.205	.141	-112	255 260
265 270							.105	.025	.028 145	265 270
275 280							156	177	176 178	275 280
285							178	176		285 290
290 300							173	173		300
315 330										215
335									179 181	315 330 335

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			ALPHA =	24.78,	Pii = 45.0,	BODY	AL ONE			
THE TA DEG	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THET A DEG
0							166	155	166	0 25
25 30									177	30
60							170	165	178	45 60
70							132	156		70 75
75 80									150	80
85 90							101	102	107 084	85 90
95 100							~•092	084	086 078	95 100
105							.011	017		105 110
120 120							•112	.085		120
135 150									.126 .140	135 150
155							.219	.177	.170	155 180
180 205								• • • • •		205
210 225									.194 .215	210 225
240							.293	.236		240 250
250 255							.307	.235	200	255
260 265							.186	.091	.200 .097	260 265
270 275							155	180	130 184	270 275
280							163	177	185	280 285
285 290										L +0
300 315							180	174	182	300 315
330 335									186	330 335
			ALPHA =	4.61,	PHI = 67.5,	8001	ALONE			
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THETA
0							033	042	035	0
25 30									034	25 30
45 60							033	040	036	60
70 75							035	036		70 75
80									021	80 85
85 90							038	032	021 023	90
95 100							054	038	023 030	95 100
105							033	~.060		105 110
110 120							024	~.045		120
135 150									038 037	135 150
155 180							010	029	029	155 180
205								••••		205
210 225									027 025	210 225
240 250							005	024		240 250
255							006	025	023	255 260
260 265							015	038	028	265
270 275							039	045	040 033	270 275
280 285							037	037	025	280 285
290										
300							034	027		290
315							034	037	031	300 315
							034	037	031 037	300

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(a) Continued

ALPHA . 9.62, PHI . 67.5, BODY ALONE

THETA											
DEG	0.10	0.20	0.30	0.40	CP AT	X/L• 50	0.60	0.70	0.85	0.95	THE TA
0					•••			049	056	052	0
25 30											25
45										053 057	30 45
60 70								045	057		60 70
75								047	057		75
80 85								058	049	039 033	80 85
90										028	90
95 100								064	043	028 031	95 100
105 110								056	087		105 110
120								032	053		120
135 150										041 036	135 150
155								- 01	- 022		155
180 205								01	023	024	180 205
210 225										017 010	210 225
240								.019	005	- • • • •	240
250 255								.027	•002		250 255
260										.001	260
265 270								•020	024	022 082	265 270
275 280								071	092	092 087	275 280
285								073	079	-,001	285
290 300								057	053		300 300
315										052	315
330 335										057	330 335
			ALPHA =	14.61,	PHI (67.5,	8 DD Y	ALONE			
THETA					CP AT	×/1 =					
DEG	0.10	0.20	0.30	0.40							THETA
0 25						.50	0.60	0.70	0.85	0.95	THETA DEG
30						.50	0.60	0.70 079	0.85	0.95	
45 60						.50	0.60			086 091	0 25 30
70 75						.50	0.60			086	DEG 0 25 30 45 60
60						.50	0.60	079	083	086 091	DEG 0 25 30 45
85						.50	0.60	079 072 072	083 085 074	086 091 091	DEG 0 25 30 45 60 70 75 80
90						.50	0.60	079 072 072 065	083 085 074 061	086 091 091 058 055 043	DEG 0 25 30 45 60 70 75 80 85
90 95						.50	0.60	079 072 072	083 085 074	086 091 091 058 055 043 037	DEG 0 25 30 45 60 70 75 80 85
90 95 100 105						.50	0.60	079 072 072 065	083 085 074 061	086 091 091 058 055 043	DEG 0 25 30 45 60 70 75 80 85 90 95 100
90 95 100 105 110						.50	0.60	079 072 072 065 065	083 085 074 061 055	086 091 091 058 055 043 037	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110
90 95 100 105 110 120						.50	0.60	079 072 072 065 065	083 085 074 061 095	086 091 091 058 055 043 037 039	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110 120 135
90 95 100 105 110 120 135 150						.50	0.60	079072072065065075	083 085 074 061 055 098	086 091 091 056 055 043 037 039	0 25 30 65 65 67 70 77 80 80 90 90 105 1120 135 150 155
90 95 100 105 110 120 135 150 155 180						.50	0.60	079 072 072 065 065	083 085 074 061 095	086 091 091 058 055 043 037 039	0 25 30 45 60 70 75 80 90 90 100 120 135 150 155 180 205
90 95 100 105 110 120 135 150 155 180 205 210						.50	0.60	079072072065065075	083 085 074 061 055 098	086 091 091 058 055 043 037 039	0 25 30 45 65 60 77 77 80 80 90 90 105 110 120 135 180 205 210
90 100 105 110 120 135 155 180 205 210 225 240						.50	0.60	079072072065065075	083 085 074 061 055 098	086 091 091 058 055 043 037 039	0 25 30 45 60 77 75 80 90 95 110 120 135 150 205 210 225 240
90 95 100 105 110 120 135 150 155 180 205 210 225 240 250						.50	0.60	079072072065065075035	083 085 074 061 055 098 054	086 091 091 058 055 043 037 039	0 25 30 45 60 70 75 80 95 100 125 150 120 205 225
90 95 100 105 110 120 135 150 155 180 205 210 225 250 255 260						.50	0.60	079072072065065075035 .017	083085074061055098054006	086091091056055043037039035026010 .004 .016	DE6 0 25 30 45 60 77 77 80 80 90 91 100 110 110 115 110 115 120 220 220 250 250
90 95 100 105 110 120 135 155 180 205 210 225 240 255 260 265 270						.50	0.60	079072072065065075035 .017	083085074061095098054006	086091098055043037039010010016	0 25 30 45 60 70 75 80 90 95 100 100 120 135 150 120 205 210 225 240 250 260 260 265
90 90 100 105 110 120 135 150 155 180 205 210 225 240 255 260 265 275						.50	0.60	079072072065065075035 .017	083085074061055098054006	086091098058055043037039035026010 .004 .016	DEG 0 25 30 45 60 70 75 80 90 100 120 120 120 120 225 240 250 255 266
90 90 100 105 110 120 135 155 180 205 210 225 240 255 260 265 270 275 280 275 280						.50	0.60	079072072065065075035 .017	083085074061095098054006	086091091056055043037039035026010 .004 .016	DE6 0 25 30 45 60 77 70 75 80 90 91 100 120 135 150 225 240 250 250 275 260 275 285
90 90 100 105 110 120 135 150 205 210 225 240 255 260 265 270 270 275 285 290 300						.50	0.60	079072072065065075035017059063066	083085074061055098054006 .028 .045 .021116	086091098095043037039036010 .004 .016	0 25 30 45 60 77 75 80 95 100 120 120 120 120 120 120 120 120 120
90 90 100 105 110 120 135 150 155 180 205 210 225 240 255 265 275 280 285 270 285 270						.50	0.60	079072072065065075035017059083066105	083085074061055098054006 .028 .045 .021116122	086091091056055043037039035026010 .004 .016	DEG 0 25 30 45 60 70 75 80 85 90 100 120 125 150 125 200 225 240 255 277 280 289

			ALPHA .	19.63.	PHI = 67.5,	800Y	AL DNE			
THETA DEG	0.10	2.20	0.30	0.40	CP AT X/L* 0.50	0.60	0.70	0.85	0.95	THE TA
0							135	133	144	٥
25 30									156	25 30
45 60							107	117	142	45 60
70 75							092	094		70 75
80 85							080	083	092 085	80 85
90									056	90
95 100							077	071	059 063	95 100
105 110							082	105		105 110
120 135 150							028	044	017 004	120 135 150
155 180							.046	.022	.019	155
205 210 225 240							.112	.076	.038	205 210 225 240
250										250
?55 26u							.153	.107	.117	255 260
265 270							.164	.086	.093 030	265 270
275 280							046	105	121 156	275 280
285 290							110	135		285 270
300 315 330 335							129	137	152 156	300 315 330 335
THETA			ALPHA •	24.61,	PHE = 67.5	, 8004	ALONE			THETA
066	0.10	0.20	0.30	0.40		0.60	0.70	0.05	0.95	DEG
25							147	144	155 157	0 25 30
30 45								- 111	143	45
60 70							144	131		60 70
75 80							124	119	106	75 80
85 90							119	115	112 108	85 90
95 100							091	112	118 124	95 100
105 110							079	101		105 110
120 135 150							012	026	.010	120 135 150
155 100							.084	.058	.054	155 180
205 210									.081	205 210
225 240							.173	.133	.104	225 240
250							.234	.180		250 255
295 260									.196	260
265 270							.261	.169	.024	265 270
275 280							017	084	100 148	275 280
285 290							108	136		285 290
300 315							133	142	160	300 315
330 335									165	330 335

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0.70

-.023

0.85

-.036

-.035 -.034 --.033

0.60

.008

(a)	Continued
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ALPHA = -4.97, PHI = 90.0, BODY ALONE

.016

0.10

.058

0.20

.040

.031

.023

30			.030			.004			034	25
45			.054			.006			033	30 45
60	.085	.048	.039	.022	.018	.004	021	033		60
70			.040			.011				70
75	.091	.063	.054	.030	.027	.016	021	034		75
80			.057			.010			017	80
85 90	.153 .188	.116 .145	.084 .115	.059 .076	.046 .056	.018 .024	022	+.02h	C14	85 90
95	.162	.118	.087	.061	.043	.018	021	027	011 015	95
100	****	****	.064			.011	****	•••	019	100
105	.100	.077	.054	.036	.032	.008	013	031	•••	105
110			.048			.008				110
120	.073	.055	.044	.027	.019	.005	020	033		120
135			.041			•002			034	135
150 155			.03R			.001			037	150
160	.063	.047	.037	.025	.013	.000	020	038	037	155 180
205	*****		.032	****		•002				205
210									039	210
225			.038			.001			038	225
240	.058	• 0 4 2	.071	.021	.013	001	026	045		240
250			.033			005				250
255 260	.061	.041	.030	.020	.010	006	033	040	010	255
265	.074	.046	.031	.016	.007	- 26 007	034	028	019 015	260 265
270	.079	.048	-034	.018	.007	007	034	-1020	012	270
275	.070	.045	.036	.021	.069	007	030	028	014	275
280			.043			004			018	280
285	.057	.037	.032	.019	.010	004	032	036		285
290			.029			204				290
300	.058	.037	.030	.026	.012	002	326	042		300
315 330			.030			000			039	315
335			.035			001			039	330 335
			ALPHA =	53,	0.00 - IH	. 8004	ALONE			
THETA			ALPHA =		PHI = 90.0	• 800Y	ALONE			THETA
THE TA DEG	0.10	0.20	ALPHA =			0.60	0.70	0.85	0.95	THETA DEG
DEG			0.30	0.40	0.50	0.60	0.70			DEG
DEG O	0.10	0.20	0.30	c	AT X/L+	0.60		0.85	0.95	DEG O
DEG 0 25			0.30	0.40	0.50	0.60	0.70		031	0 E G
DEG 0 25 30			0.30	0.40	0.50	0.60 .010 .004	0.70		031 031	0 25 30
DEG 0 25			0.30	.022	0.50	0.60 .010 .004	0.70		031	0 25 30 45
0 25 30 45 60 70	.061	.041	0.30 .032 .030	0.40	0.50 .015	0.60 .010 .004	0.70	034	031 031	0 25 30 45 60 70
0 25 30 45 60 70 75	.061	.041	0.30 .032 .030 .052 .034 .031	.022	0.50 .015	0.60 .010 .004 .005 .001	0.70	034	031 031 033	DEG 0 25 30 45 60 70 75
0 25 30 45 60 70 75	.061	.041	0.30 .032 .030 .052 .034 .031	.022 .017	0.50 .015	0.60 .010 .004 .005 .001 .005 .009	0.70 020 023 028	034 034 036	031 031 033	DEG 0 25 30 45 60 70 75
DEG 25 30 45 60 70 75 80	.061 .079 .070	.041 .045 .050	0.30 .032 .030 .052 .034 .031 .041	.022 .017 .023	0.50 .015 .014 .019	0.60 .010 .004 .005 .001 .005 .009	0.70	034	031 031 033 017 014	0 25 30 45 60 70 75 60 65
DEG 0 25 30 45 60 70 75 80 85	.061 .079 .070 .103	.041 .045 .050 .073	0.30 .032 .030 .052 .034 .031 .041 .037	.017 .022 .017 .020	.015 .015 .014 .019	0.60 .010 .004 .005 .001 .005 .009 000	0.70 020 023 028 032	034 034 036 025	031 031 033 017 014 012	DEG 0 25 30 45 60 70 75 80 85
DEG 25 30 45 60 70 75 80	.061 .079 .070	.041 .045 .050	0.30 .032 .030 .052 .034 .031 .041 .037 .047	.022 .017 .023	0.50 .015 .014 .019	0.60 .010 .004 .005 .001 .005 -009 000 000	0.70 020 023 028	034 034 036	031 031 033 017 014 012	0 25 30 45 60 75 80 85 95
0 25 30 45 60 70 75 80 85	.061 .079 .070 .103	.041 .045 .050 .073	0.30 .032 .030 .052 .034 .031 .041 .037	.017 .022 .017 .020	.015 .015 .014 .019	0.60 .010 .004 .005 .001 .005 .009 000	0.70 020 023 028 032	034 034 036 025	031 031 033 017 014 012	DEG 0 25 30 45 60 70 75 80 85
0 25 30 45 60 70 75 80 85 90 95 100	.061 .079 .070 .103 .118 .108	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .047 .047 .047 .047	.022 .017 .022 .017 .020 .029 .033 .024	.015 .015 .015 .014 .019 .020 .020 .020	0.60 .010 .004 .005 .001 .005 .009 000 000 003 004 003	0.70 020 023 028 032 033	034 034 036 025 029	031 031 033 017 014 012	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105
0 25 30 45 60 70 75 85 90 100 105 110	.061 .079 .070 .103 .118	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .040	.017 .022 .017 .025 .029 .033	.0.50 .015 .014 .019 .020 .020	0.60 .010 .004 .005 .001 .005 .009 -000 -000 004 003 004 002	0.70 020 023 028 032 033	034 034 036 025 029	031 033 017 014 012 016 023	DEG 0 25 30 45 60 70 75 80 85 90 95 100 103
0 25 30 45 60 70 75 80 85 90 95 100 105 1120 120 132	.061 .079 .070 .103 .118 .108	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .047 .047 .047 .047	.022 .017 .022 .017 .020 .029 .033 .024	.015 .015 .015 .014 .019 .020 .020 .020	0.60 .010 .004 .005 .001 .005 .009 000 000 003 004 003	0.70 020 023 028 032 033 022	034 036 025 029	031 031 033 017 014 012 016 023	DEG 0 25 30 45 60 70 75 80 95 90 95 100 105 110
0 E G 0 250 45 600 75 80 85 90 100 110 120 130	.061 .079 .070 .103 .118 .108	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .047 .047 .047 .047 .047 .040 .037 .035	.022 .017 .022 .017 .020 .029 .033 .024	.015 .015 .015 .014 .019 .020 .020 .020	0.60 .010 .004 .005 .005 .009 000 000 003 004 003 004 002	0.70 020 023 028 032 033 022	034 036 025 029	031 033 017 014 012 016 023	0 25 30 45 60 70 75 80 85 90 95 100 121 125 150
0 25 30 45 60 70 75 85 90 95 100 105 1120 135 155	.061 .079 .070 .103 .118 .108 .077	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .040 .037 .035	.017 .022 .017 .025 .029 .033 .024 .024	.015 .015 .015 .014 .019 .020 .018 .023	0.60 .010 .004 .005 .001 .005 .009 000 003 004 003 004 002	0.70 020 023 028 032 033 022	034 036 025 029 036	031 031 033 017 014 012 012 023	0 25 30 45 65 67 70 75 80 90 95 100 121 135 155
0 E G 0 25 30 45 60 75 85 95 100 110 125 150 160	.061 .079 .070 .103 .118 .108	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .047 .047 .047 .035 .037	.022 .017 .022 .017 .020 .029 .033 .024	.015 .015 .015 .014 .019 .020 .020 .020	0.60 .010 .004 .005 .001 .009 000 003 004 002 002	0.70 020 023 028 032 033 022	034 036 025 029	031 031 033 017 014 012 016 023	0 25 30 45 60 65 90 100 125 150 150 150 150
0 25 30 45 60 70 75 85 90 95 100 105 1120 135 155	.061 .079 .070 .103 .118 .108 .077	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .040 .037 .035	.017 .022 .017 .025 .029 .033 .024 .024	.015 .015 .015 .014 .019 .020 .018 .023	0.60 .010 .004 .005 .001 .005 .009 000 003 004 003 004 002	0.70 020 023 028 032 033 022	034 036 025 029 036	031 031 033 017 014 012 012 023	0 25 30 45 60 70 75 80 90 95 100 121 135 150
0 E G 0 250 450 670 750 850 95100 1100 1201 1500 1500 2050 2150	.061 .079 .070 .103 .118 .108 .077 .065	.041 .045 .050 .073 .086 .075 .060	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .047 .035 .035 .035	.017 .022 .017 .020 .029 .033 .025 .024	.015 .015 .015 .014 .019 .020 .020 .018 .023	0.60 .010 .004 .005 .001 .005 .009000003004002002002002	0.70 020 023 028 032 033 022 024	034 036 025 029 036 036	031 031 033 017 014 012 016 023	0 25 30 45 60 70 75 60 95 90 100 120 125 150 205 225
0 25 30 45 60 70 75 85 90 90 100 120 120 130 150 120 220 210 2240	.061 .079 .070 .103 .118 .108 .077	.041 .045 .050 .073 .086 .075	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .040 .035 .035 .035	.017 .022 .017 .025 .029 .033 .024 .024	.015 .015 .015 .014 .019 .020 .018 .023	0.60 .010 .004 .005 .001 .005 .009 -000 -0003004002002002002002	0.70 020 023 028 032 033 022	034 036 025 029 036	031 031 033 017 014 012 016 023 035 035	0 25 30 45 60 70 75 80 90 90 90 100 103 110 155 180 210 225
0 25 30 45 60 70 75 80 85 90 90 100 120 120 120 120 120 120 120 120 12	.061 .079 .070 .103 .118 .108 .077 .065	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .065 .047 .037 .035 .035 .035	.022 .017 .025 .029 .033 .024 .024 .021	.015 .015 .014 .019 .020 .018 .023 .015	0.60 .010 .004 .005 .001 .009 000 003 004 002 002 002	0.70020023028032033022024018	034 036 025 029 036 035	031 031 033 017 014 012 016 023 035 035	0 25 30 65 60 77 80 85 90 105 110 120 135 150 205 210 225 250
0 E G 0 25 30 45 60 75 85 95 100 110 120 130 150 150 150 225 240 255	.061 .079 .070 .103 .118 .108 .077 .065	.041 .045 .050 .073 .086 .075 .060	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .046 .037 .035 .035 .035 .034 .034	.017 .022 .017 .020 .029 .033 .025 .024	.015 .015 .015 .014 .019 .020 .020 .018 .023	0.60 .010 .004 .005 .001 .005 .009000003004002002002002002002	0.70 020 023 028 032 033 022 024	034 036 025 029 036 036	031 033 017 014 012 016 023 035 035 034 032	0 E6 0 25 30 45 60 77 60 65 90 100 120 130 150 150 205 210 255
DEG 25 30 45 670 775 885 905 1005 1120 1350 1205 12105 22105 22105 22105 22505 22505	.061 .079 .070 .103 .118 .108 .077 .065	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .040 .037 .035 .035 .035 .034 .034 .034	.017 .022 .017 .025 .029 .033 .024 .021	.015 .015 .015 .014 .019 .020 .018 .023 .015	0.60 .010 .004 .005 .001 .005 .009000003004002002002002005 .006 .005	0.70020023028032033022024018	034 036 025 029 036 036 035	031 031 033 017 014 012 012 023 035 036 034 032	0 E G G G G G G G G G G G G G G G G G G
DEG 250 455 670 775 855 905 1005 1100 1205 1205 1205 1205 1205 12	.061 .079 .070 .103 .118 .108 .077 .065	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .046 .037 .035 .035 .035 .034 .034	.022 .017 .025 .029 .033 .024 .024 .021	.015 .015 .014 .019 .020 .018 .023 .015	0.60 .010 .004 .005 .001 .005 .009000003004002002002002002002	0.70020023028032033022024018	034 036 025 029 036 035	031 031 033 017 014 012 016 023 035 035 034 032	0 E6 0 25 30 45 60 77 60 65 90 100 120 130 150 150 205 210 255
0 E G	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .047 .045 .047 .040 .037 .035 .035 .035 .034 .034 .034 .034 .034	.022 .017 .025 .029 .033 .024 .024 .021	.015 .015 .015 .014 .019 .020 .018 .023 .015	0.60 .010 .004 .005 .001 .005 .009000003004002002002002005 .005 .005 .005 .005 .005	0.70020023028032033022024018	034 036 025 029 036 036 035	031033017014012016023035036034032 030	0 25 30 45 60 70 75 80 90 90 105 110 135 155 180 205 210 250 250 265 275
DEG 250 455 670 775 885 995 1009 1110 1209 1209 1209 1209 1209 1209	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132 .109	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .047 .047 .047 .047 .047 .035 .035 .035 .035 .034 .034 .034 .034 .034 .034	.022 .017 .022 .017 .025 .029 .033 .025 .024 .021	.015 .015 .015 .016 .020 .020 .020 .018 .023 .015	0.60 .010 .004 .005 .005 .009 -000003004002002002002004 .005 .005 .005 .006	0.70020023028032033022024018019025030027	034 036 025 029 036 036 035 035 032 029	031 031 033 017 014 012 016 023 035 035 034 032 030	0 E6 0 25 30 45 60 70 75 60 65 90 100 120 120 120 120 120 120 255 260 270 278 80
0 E G 25 30 45 60 775 85 90 5100 5120 5120 5120 5120 5120 5120 512	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .041 .037 .047 .045 .047 .040 .035 .035 .035 .034 .034 .034 .034 .034 .040 .040 .040	.022 .017 .025 .029 .033 .024 .021 .025	.015 .015 .015 .016 .019 .020 .018 .023 .015	0.60 .010 .004 .005 .001 .005 .009 -000 -0003004002002002002002005 .005 .005 .005 .005 .005 .005 .00	0.70020023028032033022024018019025030	034 036 025 029 036 036 035 035	031033017014012016023035036034032 030	0 EG 0 25 30 45 60 75 80 85 90 90 100 120 135 150 205 210 255 260 257 260 275 280
0 E G	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132 .109 .073	.041 .045 .050 .073 .086 .075 .060 .046 .046	0.30 .032 .030 .052 .034 .031 .047 .045 .047 .040 .037 .035 .035 .035 .034 .034 .034 .034 .040 .040 .040 .054 .054 .054	.022 .017 .022 .017 .025 .029 .033 .024 .021 .025	.015 .015 .015 .016 .019 .020 .018 .023 .015 .013	0.60 .010 .004 .005 .001 .009000003004002002002001 .005 .009 .005 .009	0.70020023028032033022024018019025030027025	034036025029036035035032	031033017014012016023035036034032 030	0 25 30 45 60 70 75 80 85 90 100 120 120 125 250 255 260 255 260 275 280 279 290
0 E G 250 450 670 775 850 905 1000 1100 1200 1350	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132 .109	.041 .045 .050 .073 .086 .075 .060 .046	0.30 .032 .030 .052 .034 .031 .047 .047 .045 .047 .040 .035 .035 .035 .035 .034 .034 .034 .034 .034 .034	.022 .017 .022 .017 .025 .029 .033 .025 .024 .021	.015 .015 .015 .016 .020 .020 .020 .018 .023 .015	0.60 .010 .004 .005 .009 -000003004002002002002001 .004 .005 .009 .009 .000 .009 .009 .009 .009	0.70020023028032033022024018019025030027	034 036 025 029 036 036 035 035 032 029	031 031 033 017 014 012 016 023 035 036 034 032 030	0 E6 0 25 30 45 60 775 60 65 90 100 120 130 150 150 205 210 255 260 265 270 2780 279 290
DEG 250 450 670 750 850 905 1009 1150 1205 1205 1205 1205 1205 1205 1205	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132 .109 .073	.041 .045 .050 .073 .086 .075 .060 .046 .046	0.30 .032 .030 .052 .031 .041 .037 .047 .047 .047 .040 .035 .035 .035 .034 .034 .034 .040 .036 .040 .054 .040 .054 .054 .054 .055	.022 .017 .022 .017 .025 .029 .033 .024 .021 .025	.015 .015 .015 .016 .019 .020 .018 .023 .015 .013	0.60 .010 .004 .005 .001 .005 .009 -000 -000 -0003 -0002 -0002 -0002 -0002 -0004 .005 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .005 .006 .006	0.70020023028032033022024018019025030027025	034036025029036035035032	031033017014012016023035036034032 030	0 25 30 45 60 70 75 60 95 90 100 110 120 135 150 205 215 225 240 255 265 275 280 275 280 313 313
0 E G	.061 .079 .070 .103 .118 .108 .077 .065 .066 .078 .118 .132 .109 .073	.041 .045 .050 .073 .086 .075 .060 .046 .046	0.30 .032 .030 .052 .034 .031 .047 .047 .045 .047 .040 .035 .035 .035 .035 .034 .034 .034 .034 .034 .034	.022 .017 .022 .017 .025 .029 .033 .024 .021 .025	.015 .015 .015 .016 .019 .020 .018 .023 .015 .013	0.60 .010 .004 .005 .009 -000003004002002002002001 .004 .005 .009 .009 .000 .009 .009 .009 .009	0.70020023028032033022024018019025030027025	034036025029036035035032	031033017014012016023035036036031031031032030	0 25 30 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

ORIGINAL PAGE IS OF POOR QUALITY

0.85

THETA DEG

3.95

TABLE 1.- Continued

(a) Continued

CP AT X/L-0.40 0.50

BODY ALONE

0.70

0.60

ALPHA . 4.49, PHI . 90.0,

0.10

0.20

0.30

0.0	****	0.20	****	0.40	0.70	0.00	0.10	0.03		DEG
0	.056	.033	.025	.018	.011	.005	025	037	- 034	
25	****		.021		••••	001	027	037	036	0
30									037	25
45			.042			001			043	30 45
60	.072	.033	.023	-011	.006	006	030	044	•043	60
70			.018		••	003		••••		70
75	.053	.034	.028	.009	.007	000	~.036	042		75
8.0			.019	•••	••••	012	030	-+042	021	80
85	•013	.040	.020	.009	.002	012	036	028	017	85
90	• 0 c Z	. 42	.028	.008	002	012	-030	050	014	90
7.5	•065	.040	.020	.008	002	013	037	029	019	95
100	••••		.021			012			022	100
105	.056	-042	.023	.010	.011	011	033	043	022	105
110		• • • •	.023		****	009	****			110
120	.054	.034	.026	.012	.005	000	031	047		120
135		· · ·	.027		••••	007	****	•••	041	135
150						••••			041	150
155			.028			005				155
182	.054	.038	.029	. J20	.009	~.003	024	039	036	180
205			.031		••••	.000		••••	••••	205
210			****						034	210
225			.040			.001			030	225
240	.064	.047	.039	.028	.021	.004	021	033		240
250			.049			.008				250
255	.089	. 062	.053	.039	-027	.010	019	028		255
260		•	.066		***	.016	••••	****	016	260
265	.171	.119	.094	.071	.051	.025	016	026	012	265
270	-200	.144	.119	.087	.063	•032	*****		012	270
275	.160	.109	.094	.067	.047	.021	016	027	013	275
280			.075		••••	.013	****	***	016	280
285	.089	.056	-051	.035	.024	.009	020	028	010	285
290			.043		•••	.006		****		290
300	.067	.040	.037	.031	-018	.001	022	031		300
315			.031	••••	••••	.001		****	030	
330						****			636	315 330
335			.033			002			036	335
						****				337
			ALPHA =	9.48.	1-0 9 = 1H9	O, BODY	ALONE			
			ALPHA =	9.48,	PHI = 90.	o, 800v	' ALONE			
THETA			ALPHA =	9.48,	PHI = 90.0	O, BODY	ALONE			THETA
THETA DEG	0.10	0.20	ALPHA =	9.48,		0, 80DY	* ALONE 0.70	0.85	0.95	THETA DEG
DEC			0.30	0.40	CP AT X/L= 0.50	0.60	0.70			DEG
O O	0.10 .046	0.20	0.30		CP AT X/L=	0.60		0.85 047	0.95 047	DEG O
DE 6 0 25			0.30	0.40	CP AT X/L= 0.50	0.60	0.70		047	DEG 0 25
DEG 0 25 30			0.30 .017 .014	0.40	CP AT X/L= 0.50	0.60 004 012	0.70		047 054	DEG 0 25 30
DEG 0 25 30 45	.046	.029	0.30 .017 .014	0.40	0.50 .000	0.60 004 012 014	0.70 033	047	047	DEG 0 25 30 45
DEG 0 25 30 45 60			0.30 .017 .014 .035	0.40	CP AT X/L= 0.50	0.60 004 012 014 021	0.70		047 054	DEG 0 25 30 45 60
0 25 30 45 60 70	.046 -057	.029	0.30 .017 .014 .035 .013	0.40 .007	CP AT X/L- 0.50 .000	0.60 004 012 014 021 018	0.70 033	047	047 054	DEG 0 25 30 45 60 70
DEG 0 25 30 45 60 70	.046	.029	0.30 .017 .014 .035 .013 .007	0.40	0.50 .000	0.60 004 012 014 021 018 014	0.70 033	047	047 054 059	DEG 0 25 30 45 60 70 75
DEG 0 25 30 45 60 70 75	.046 .057 .032	.019	0.30 .017 .014 .035 .013 .007 .015	0.40 .007 003	CP AT X/L= 0.50 .000 010 008	0.60 004 012 014 021 018 014 023	0.70 033 045 049	047 062 050	047 054 059	DEG 0 25 30 45 60 70 75
DEG 0 25 30 45 60 70 75 80 85	.046 .057 .032	.029 .019 .017	0.30 .017 .014 .035 .013 .007 .015	0.40 .007 003 004	CP AT X/L- 0.50 .000 010 008	0.60 004 012 014 021 016 014 023	0.70 033	047	047 054 059 028 026	DEG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80 85	.057 .032 .033	.029 .019 .017 .016	0.30 .017 .014 .035 .013 .007 .015 .005	0.40 .007 003 004 002	CP AT X/L- 0.50 .000010008008	0.60 004 012 014 016 014 023 019 019	0.70 033 045 049 039	047 062 050 033	047 054 059 028 026 018	DEG 0 25 30 45 60 70 75 80 85
DEG 0 25 30 45 60 70 75 80 85 90	.046 .057 .032	.029 .019 .017	0.30 .017 .014 .035 .013 .007 .015 .005	0.40 .007 003 004	CP AT X/L- 0.50 .000 010 008	0.60 004 012 014 021 018 019 019 020	0.70 033 045 049	047 062 050	047 054 059 028 026 018 027	DEG 0 25 30 45 60 70 75 80 85 90
DEG 0 25 30 45 60 70 75 80 85 90 93	.046 .057 .032 .033 .024	.029 .019 .017 .016 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012	003 004 002 003 005		0.60 004 012 014 021 018 014 023 019 019 020 020	0.70 033 045 049 039	047 062 050 033	047 054 059 028 026 018	DEG 0 25 30 45 60 70 75 80 85 90
DEG 0 25 30 45 60 70 75 80 85 90 93 100	.057 .032 .033	.029 .019 .017 .016	0.30 .017 .014 .035 .007 .015 .005 .004 .012 .005	0.40 .007 003 004 002	CP AT X/L- 0.50 .000010008008	0.60 004 012 014 021 018 019 019 020 023 023	0.70 033 045 049 039	047 062 050 033	047 054 059 028 026 018 027	DEG 0 25 30 45 60 70 75 80 95 90 95
DEG 0 25 30 45 60 70 75 80 85 90 93 100 105	.046 .057 .032 .033 .024 .031	.029 .019 .017 .016 .015 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007	003 004 002 003 005	010 008 009 011 004	0.60004012014021016019019019023020023	0.70 033 045 049 039 040	047 062 050 033 036	047 054 059 028 026 018 027	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105
DEG 0 25 30 45 60 75 80 85 90 93 100 105	.046 .057 .032 .033 .024	.029 .019 .017 .016 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .002 .007 .009	003 004 002 003 005		0.60004012014021018019019023020024023	0.70 033 045 049 039	047 062 050 033	047 059 028 026 016 027	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110 120	.046 .057 .032 .033 .024 .031	.029 .019 .017 .016 .015 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007	003 004 002 003 005	010 008 009 011 004	0.60004012014021016019019019023020023	0.70 033 045 049 039 040	047 062 050 033 036	047 059 028 026 018 027 028	DEG 0 25 30 45 60 70 75 80 95 100 105 110 120
DEG 0 25 30 45 60 70 75 80 85 90 93 100 105 110	.046 .057 .032 .033 .024 .031	.029 .019 .017 .016 .015 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015	003 004 002 003 005	010 008 009 011 004	0.60004012014018014023020023023024	0.70 033 045 049 039 040	047 062 050 033 036	047 059 028 026 016 027	DEG 0 25 30 45 60 70 75 80 95 100 105 110 120 135
DEG 0 25 30 45 60 75 80 85 90 93 100 105 110 120 135	.046 .057 .032 .033 .024 .031 .035	.029 .019 .017 .016 .015 .015 .024	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015	0.40 .007 003 004 002 003 005	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019023023024023020016	0.70 033 045 049 039 040 045	047 062 050 033 036 054	047 059 028 026 018 027 028	DEG 0 25 30 45 60 70 75 80 95 90 105 115 120 135
DEG 0 25 3 3 4 5 6 6 7 7 7 7 5 8 9 9 9 9 9 10 0 11 0 12 0 12 0 12 0 15 5 15 0 15 5 18 0	.046 .057 .032 .033 .024 .031	.029 .019 .017 .016 .015 .015	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007 .009 .010 .014 .015	003 004 002 003 005	010 008 009 011 004	0.60004012014021018019020023024023024023	0.70 033 045 049 039 040	047 062 050 033 036	047 059 028 026 018 027 028	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 155
DEG 0 25 30 45 60 75 80 85 90 93 100 105 110 120 135	.046 .057 .032 .033 .024 .031 .035	.029 .019 .017 .016 .015 .015 .024	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015	0.40 .007 003 004 002 003 005	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019023023024023020016	0.70 033 045 049 039 040 045	047 062 050 033 036 054	047 059 028 026 018 027 028	DEG 0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 155 160 205
DEG 0 25 30 45 60 77 75 80 85 90 100 105 110 120 135 150 155 180 205	.046 .057 .032 .033 .024 .031 .035	.029 .019 .017 .016 .015 .015 .024	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007 .009 .010 .014 .015	0.40 .007 003 004 002 003 005	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019020023024023024023	0.70 033 045 049 039 040 045	047 062 050 033 036 054	047054059028026018027028	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 155
DEG 0 25 30 45 60 70 75 80 85 90 93 100 110 120 135 150 150 150 180 205	.046 .057 .032 .033 .024 .031 .035	.029 .019 .017 .016 .015 .015 .024	0.30 .017 .014 .035 .013 .007 .015 .004 .012 .005 .007 .009 .010 .014 .015	0.40 .007 003 004 002 003 005	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019018020024024024024024024024024025	0.70 033 045 049 039 040 045	047 062 050 033 036 054	047059028026018027028058056046	DEG 0 25 30 45 60 75 80 95 100 105 110 120 135 150 159 160 205 210
DEG 0 25 30 45 60 70 75 80 85 90 100 110 120 125 150 150 150 120 205 225	.046 .057 .032 .033 .024 .031 .035 .039	.029 .019 .017 .016 .015 .015 .024 .020	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007 .009 .010 .014 .015	0.40 .007 003 004 002 005 006	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019020023024023024023026024023	0.70 033 045 049 039 045 045	047 062 050 033 036 054 064	047059028026018027028058056046	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 150 205 210 225
DEG 0 25 30 45 60 75 80 85 90 100 105 110 120 135 150 150 205 210 225 240	.046 .057 .032 .033 .024 .031 .035 .039	.029 .019 .017 .016 .015 .015 .024 .020	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015	0.40 .007 003 004 002 005 006	CP AT X/L- 0.50 .000 010008009011004010	0.60004012014021018019023026023026023020016012008	0.70 033 045 049 039 045 045	047 062 050 033 036 054 064	047059028026018027028058056046	DEG 0 25 30 45 60 70 75 80 95 100 105 1150 155 160 205 210 225
DEG 0 25 3 3 3 4 5 6 6 7 7 7 7 5 8 9 9 9 9 9 9 1 1 0 0 1 1 2 0 1 1 2 0 1 1 2 0 1 2 5 2 1 0 2 2 5 2 2 6 0 2 2 5 0 2 2 5 0 0 2 2 5 0 0 2 2 5 0 0 2 2 5 0 0 0 0	.046 .057 .032 .033 .024 .031 .035 .039	.029 .019 .017 .016 .015 .015 .024 .020	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007 .009 .010 .014 .015	0.40 .007 003 004 002 003 005 006	CP AT X/L- 0.50 .000 010008009011004010003	0.60004012014021018019020023020023020023020024023020	0.70 033 045 049 039 040 045 046	047062050033036054064	047059028026018027028058056046	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 155 160 205 210 225
DEG 0 25 30 45 60 70 75 80 85 90 95 100 110 120 135 150 155 150 205 225 240 225 260 265	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .005 .007 .010 .014 .015 .016 .017 .019 .031 .035 .052 .064 .091	0.40 .007 003 004 002 005 005 006 005	CP AT X/L- 0.50 .000 010008009011004010003	0.60004012014021018019023026023026023020016010023020011018	0.70 033 045 049 039 040 045 046	047062050033036054064	047059028026018027028056046046	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 159 210 225 240 250 255
DEG 0 25 30 45 60 75 80 85 90 100 105 110 120 135 150 150 205 210 225 240 250 265 270	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015 .016 .017 .019 .031 .037 .092 .004 .014 .015	0.40 .007 003 004 002 003 005 006 005	CP AT X/L- 0.50 .000 010008009011004010003	0.60004012014021018019019023026023020016012008	0.70033045049039045045033023013	047062050033036054064069037025012	047059028026018027028058056046044038	DEG 0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 159 205 210 225 240 250 265 270
DEG 0 25 30 45 60 70 75 80 90 93 100 105 110 120 135 150 150 205 210 225 240 250 265 275	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .007 .015 .005 .004 .012 .005 .007 .009 .010 .014 .015 .016 .017 .019 .031 .035 .052 .064 .091 .143 .168	0.40 .007 003 004 002 005 005 006 005	CP AT X/L- 0.50 .000 010008009011004010003	0.6000401201402101801902002402302001601200801601101800160110180016011018001601101800160110180016	0.70033045049039040045046033	047062050033036054064069	047059028026018027028058056046046038	DEG 0 25 30 45 60 70 75 80 95 90 105 1150 120 135 150 225 240 255 260 267 275
DEG 0 25 30 45 60 70 75 80 85 90 100 110 120 1150 120 120 120 120 120 120 120 120 120 12	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015 .016 .017 .019 .031 .035 .064 .091 .143 .186 .141	0.40 .007 003 004 002 003 005 006 005 .006	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .038 .097 .125 .090	0.60004012014021016019019020020025025025025025025025025025025025025025026023026023026023026023026023026023026023026023026023026023026023026023026023026033030	0.70033045049039045046033023013 .007	047062050033036054064049037025012	047059028026018027028056046044038	DEG 0 25 30 45 60 70 75 80 85 90 100 110 120 135 150 159 205 210 225 240 255 260 265 270 275
DEG 0 25 30 45 60 77 70 75 80 85 90 95 100 105 110 120 135 120 125 205 210 225 240 250 250 265 275 280 285	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .003 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015 .016 .017 .019 .031 .037 .052 .004 .091 .143 .188 .141 .097	0.40 .007 003 004 002 003 005 006 005	CP AT X/L- 0.50 .000 010008009011004010003	0.60004012014021018023026023023020016012008008004011018009016017	0.70033045049039045045033023013	047062050033036054064069037025012	047059028026018027028058056046046038	DEG 0 25 30 45 60 77 70 775 80 95 100 105 110 120 135 150 225 240 255 240 255 265 275 280 285
DEG 0 25 30 45 60 70 75 80 85 90 91 100 110 120 1150 150 150 150 225 240 225 240 255 275 260 285 275 280 285 275	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .007 .015 .005 .004 .012 .007 .009 .010 .014 .017 .019 .031 .035 .052 .064 .091 .143 .188 .141 .097 .061	0.40 .007 003 004 002 005 005 006 005 .025 .033 .122 .138 .117	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .03e .097 .125 .090 .034	0.60004012014021018019020023026024023020016012001018011008004004001008004005005005007009	0.70033045049039040045046033023013 .007 .005	047062050033036054064069037025012014	047059028026018027028058056046046038	DEG 0 25 30 45 60 77 75 80 85 90 105 110 120 125 150 255 240 225 240 275 280 285
DEG 0 25 30 45 60 70 75 80 85 90 100 105 110 120 135 180 225 240 2250 225 240 250 265 270 275 285 285 285	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015 .016 .017 .019 .031 .035 .064 .091 .143 .188 .141 .097 .061 .097	0.40 .007 003 004 002 003 005 006 005 .006	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .038 .097 .125 .090	0.60004012014021018019018023026023026023026012018012018 -	0.70033045049039045046033023013 .007	047062050033036054064049037025012	047059028026018027028056046044038013002006010	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 135 150 157 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255
DEG 0 25 30 45 60 770 775 80 85 90 93 1100 120 135 150 120 225 240 225 240 250 265 275 280 275 280 293 315	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .007 .015 .005 .004 .012 .007 .009 .010 .014 .017 .019 .031 .035 .052 .064 .091 .143 .188 .141 .097 .061	0.40 .007 003 004 002 005 005 006 005 .025 .033 .122 .138 .117	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .03e .097 .125 .090 .034	0.60004012014021018019020023026024023020016012001018011008004004001008004005005005007009	0.70033045049039040045046033023013 .007 .005	047062050033036054064069037025012014	047059028026018027028058056046044038	DEG 0 25 30 45 60 70 75 80 95 100 105 110 125 135 150 255 240 255 240 255 275 280 275 280 300 315
DEG 0 25 30 45 60 70 75 80 85 90 95 100 110 120 135 150 155 180 205 225 240 225 240 225 240 255 275 250 265 275 275 280 285 3300 3315	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .017 .019 .031 .037 .099 .143 .166 .141 .097 .061 .045	0.40 .007 003 004 002 005 005 006 005 .025 .033 .122 .138 .117	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .03e .097 .125 .090 .034	0.60004012014021018019019023026023026021018023026015016017008	0.70033045049039040045046033023013 .007 .005	047062050033036054064069037025012014	047059028026018027028056046044038013002006010	DEG 0 25 30 45 60 77 70 75 80 85 90 105 110 120 135 150 150 225 240 225 240 255 260 275 280 283 280 300 315
DEG 0 25 30 45 60 770 775 80 85 90 93 1100 120 135 150 120 225 240 225 240 250 265 275 280 275 280 293 315	.046 .057 .032 .033 .024 .031 .035 .039 .^46 .072 .117 .256 .303 .237	.029 .019 .017 .016 .015 .015 .024 .020 .035	0.30 .017 .014 .035 .013 .007 .015 .005 .004 .012 .007 .009 .010 .014 .015 .016 .017 .019 .031 .035 .064 .091 .143 .188 .141 .097 .061 .097	0.40 .007 003 004 002 005 005 006 005 .025 .033 .122 .138 .117	CP AT X/L- 0.50 .000 010008009011004010 003 .020 .03e .097 .125 .090 .034	0.60004012014021018019018023026023026023026012018012018 -	0.70033045049039040045046033023013 .007 .005	047062050033036054064069037025012014	047059028026018027028058056046044038	DEG 0 25 30 45 60 70 75 80 95 100 105 110 125 135 150 255 240 255 240 255 275 280 275 280 300 315

ORIGINAL PAGE IS OF POOR QUALITY

0.70 0.85 0.95

THE TA DEG

TABLE 1.- Continued

(a) Continued

CP AT X/L= 0.40 0.50

THETA DEG

0.10 0.20

ALPHA = 14.49, PHI = 90.0, 800Y ALONE

3										DEG
	.037	.016	.009	032	616	018	047	060	063	o
25			.000		•	031				25
30									075	30
45			.019			035			082	45
60 70	.040	.000	008	021	031	046	070	087		60
75	.011	003	015 004	023	026	042 033	- 047	- 041		~0
80	•011	003	012	023	026	035	067	061	043	75 80
85	.011	.001	009	014	015	029	048	045	042	85
90	.003	.002	.001	013	018	027		****	031	90
95	.009	001	008	015	021	029	048	048	044	95
100			011			034			043	100
105 110	.014	.005	012 012	023	024	044 048	059	065		105
120	.019	000	007	024	032	047	070	089		110
135		•	002		****	041		- • • • •	000	135
15C									074	150
155			.003			034				155
190 205	.036	.319	.009	004	018	025	047	064	061	160
210			.014			018			054	205
225			.032			008			056 047	210 225
260	.083	.057	.043	.027	.018	.005	021	038	041	240
250			.072			.021				250
255	.153	.118	-094	.073	.059	.037	-002	017		255
260			.:39			.068			001	260
265 270	.355 .423	.276 .342	.223 .293	.183 .237	.159	-117	.050	.016	.023	265
275	.329	.258	-555	.175	.200 .152	-157 -111	.049	.013	.043	270
260	• • • •	••••	.149	• • • • •	•176	.064	.047	.013	.020 004	275 280
285	.155	.112	.096	-069	.059	.036	.001	019		285
290			.069			.010				290
300	.084	.053	.044	•032	-017	.004	022	037		300
315			.027			009			0-6	315
330 335			.021			020			060	330
337			.021			020				335
			ALPHA .	19.50,	PHI - 90.0	» BGOY	ALONE			
THETA			ALPHA .			, BGOY	ALONE			THEY A
THETA DEG	C-16	a. 20			P AT X/L-			0.85	0.95	THETA DFG
THETA DEG	C-16	0,20	ALPHA -			0.60	£LON€ G.70	0.85	0.95	THETA DEG
DEG	C.1G	0,20 .008	0.30		P AT X/L-	0.60		0.85 070	0.95 074	DEG
DE G 0 25			0.30	0.40	0.50	0.60	G.70		074	DEG 0 25
DEG 0 25 30			0.30 006 019	0.40	0.50	0.60 028 048	G.70		074	DEG 0 25 30
0 25 30 45	.027	.008	0.30 006 019	0.40	0.50 025	0.60 028 048	C.70 056	070	074	DEG 0 25 30 45
0 0 25 30 45 60			0.30 006 019 003 037	0.40	0.50	0.60 028 046 060 079	G.70		074	DEG 0 25 30 45 60
DEG 0 25 30 45 60 70	.027	.008	0.30 006 019 003 037 046 029	0.40	0.50 025	0.60 028 046 060 079 075	C.70 056	070	074 089 101	DEG 0 25 30 45 60 70 75
DEG 0 25 30 45 60 70 75 80	.027	.008 025 027	0.30 006 019 003 037 046 029 030	011 059 055	063	0.60 028 048 060 079 075 053	C.7C 056 10C 084	070 11c 084	074 089 101	DEG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80	.027 .019 013	025 027 014	0.30 006 019 037 046 029 030 023	011 059 055	025 049	0.60 028 046 060 079 075 053 050	0.70 056 100	070 11c	074 089 101 070 073	DEG 0 25 30 45 60 70 75 80 85
DEG 0 25 30 45 60 70 75 80 85	.027 .019 013 005 008	025 027 014 012	0.30 006 019 003 037 046 029 030 023	011 059 055 036	025 025 049 029	0.60 028 046 060 079 075 053 050 044	C.70 056 100 084 064	070 11c 084 070	074 089 101 070 073 060	DEG 0 25 30 45 60 70 75 80 85
0EG 0 25 30 45 60 70 75 80 85 90	.027 .019 013	025 027 014	0.30 006 019 037 046 029 030 023 010	011 059 055	025 049	0.60 028 048 079 075 053 050 044 048	C.7C 056 10C 084	070 11c 084	074 089 101 070 073 060 080	DEG 0 25 30 45 60 70 75 80 85 90
DEG 0 25 30 45 60 70 75 80 85	.027 .019 013 005 008	025 027 014 012	0.30 006 019 003 037 046 029 030 023 010 036 036	011 059 055 036	025 025 049 029	0.60 028 046 060 079 075 053 050 044	C.70 056 100 084 064	070 11c 084 070	074 089 101 070 073 060	DEG 0 25 30 45 60 70 75 80 85
DEG 0 25 30 45 60 70 75 80 85 90 95 100 105	.027 .019 013 005 008 009	025 027 014 012 016	0.30006019003037046029030023010036046	059 055 055 036 037	063 029 029 030 035	0.60 028 048 079 075 053 050 044 052 050 052	C.70 056 100 084 064 065	070 11c 084 070 074	074 089 101 070 073 060 080	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105
DEG 0 25 30 45 60 75 80 85 90 95 100 105 110	.019 013 005 008 009	025 027 014 012 016	0.30006019003037046029030023036046049	059 055 036 037	025 025 063 049 029 030 035	0.60028046079075053050044052056072086	C.70 056 100 084 065	070 11c 084 070	074 089 101 070 073 060 080	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105
DEG 0 25 30 45 60 75 80 85 90 95 100 105 110 120	.027 .019 013 005 008 009	025 027 014 012 016	0.30006019003037046029030023010036046	059 055 055 036 037	063 029 029 030 035	0.60 028 048 079 075 053 050 044 052 050 052	C.70 056 100 084 064 065	070 11c 084 070 074	074 089 101 070 073 060 075	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135	.027 .019 013 005 008 009	025 027 014 012 016	0.30006019003037046029030010036046046045036	059 055 055 036 037	063 029 029 030 035	0.60028046079075053050044048050072072086073	C.70 056 100 084 064 065	070 11c 084 070 074	074 089 101 070 073 060 080	DEG 0 25 30 45 60 70 75 80 85 90 95 100 120 120 125 150
DEG 0 25 30 45 60 75 80 85 90 95 100 105 110 120 135	.019013005008009014	025 027 014 012 016 020	0.30006019003037046029030023036046049	011 059 055 036 037 054	025 025 063 049 029 030 035 046	0.60028046079075053050044052056072086	C.70 056 100 084 064 065	070 11c 084 070 074	074 089 101 070 073 060 080 075	DEG 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135	.027 .019 013 005 008 009	025 027 014 012 016	0.30006019003037046029030036046049045036	059 055 055 036 037	063 029 029 030 035	0.60028046079075053050044052056072087086073	C.70056100084065075102	070 11c 084 070 074 08c 115	074 089 101 070 073 060 075	0 25 30 45 60 77 5 80 90 95 100 120 135 150 155 180 205
DEG 0 25 30 45 60 70 75 80 85 90 95 110 120 135 150 155 180 205 210	.019013005008009014	025 027 014 012 016 020	0.30006019003037046029030036049045045036026014	011 059 055 036 037 054	025 025 063 049 029 030 035 046	0.60028046079075053050044052072087086073	C.70056100084065075102	070 11c 084 070 074 08c 115	074089101070073060080075101092078	0 25 30 60 70 75 80 85 90 95 110 120 135 150 200 201 0
DEG 25 30 45 60 75 80 85 90 100 120 125 150 150 150 205 210 225	.027 .019013005008009014007	025 027 014 012 016 020 028	0.30006019003037046029030023010036046049045036046049	011 059 055 036 034 037 054 061	025063049029030035046065	0.60028046079075053050044048052072086073060073	C.70056100084065075102058	070 11c 084 070 074 086 115	074 089 101 070 073 060 075 101 092	0 25 30 45 60 70 75 80 95 100 125 150 155 205 225
DEG 0 25 30 45 60 75 80 85 90 95 100 120 135 150 155 180 205 210 225 240	.019013005008009014	025 027 014 012 016 020	0.30006019003037046029030036046049045036026014 .006	011 059 055 036 037 054	025 025 063 049 029 030 035 046	0.60028046060079075053050044052072086073086073	C.70056100084065075102	070 11c 084 070 074 08c 115	074089101070073060080075101092078	0 25 30 45 60 77 75 80 90 95 110 120 135 155 180 220 220 2240
DEG 25 30 45 60 75 80 85 90 100 120 125 150 150 150 205 210 225	.027 .019013005008009014007	025 027 014 012 016 020 028	0.30006019003037046029030023010036046049045036046049	011 059 055 036 034 037 054 061	025063049029030035046065	0.60028046079075053050044048052072086073060073	C.70056100084065075102058	070 11c 084 070 074 086 115	074089101070073060080075101092078	0 25 30 45 60 70 75 80 95 100 125 150 155 205 225
DEG 0 25 30 45 60 77 70 75 80 85 90 95 100 120 135 150 155 180 225 240 250 255 260	.027 .019013005008009014007	.008025027014012016020028 .009	0.30006019003037046029030036046049045036026014 .006 .035	011059055036037054061016	029029029029029029029029	0.60028046079075053050046052072087086073060044023053	C.70056100084065075102058011 .031	07011c084070074086115072028 .006	074089101070073060080075101092078	0 25 30 45 60 70 75 80 85 100 105 110 120 135 120 225 240 225 250 250 250
DEG 25 30 45 60 77 70 75 80 85 90 100 110 120 135 150 155 180 205 210 225 240 255 260	.027 .019013005008009014007	.008025027014012016020028 .009 .073 .159	0.30006019037046029030036046049045036014 .006 .035 .060 .104 -137 .203 .324	011059055036034037054061016	029029029029029029029029029029	0.60028046079075053050044046052072086073060073060044023	C.70056100084065075102058	07011c084070074086115072	074089101070073060080075101092078061047	0 25 30 45 60 70 75 85 90 105 120 125 255 250 255 265
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135 150 155 210 205 225 240 250 265 270	.027 .019013005008009014007 .024	.008025027014012016020028 .009 .073 .159 .370 .461	0.30006019003037046029030036046045036045036046045036014 .006	011059055036037054061016	025025025025029030035046029 .029 .029 .029	0.60028046060079075053050044046072086073086073060073060073060073060073	C.70056100084065075102058011 .031	07011c084070074086115072028 .006	074089101070073060060075101092078061047	0 25 30 45 60 775 80 90 90 100 120 135 150 210 225 240 255 270
DEG 0 25 30 45 60 77 70 75 80 90 90 90 100 120 135 150 155 180 205 210 225 240 250 265 275	.027 .019013005008009014007	.008025027014012016020028 .009 .073 .159	0.30006019003037046029030036046049045036014006014006	011059055036034037054061016	029029029029029029029029029029	0.60028046079075053050044052072087086073060044023050044023	C.70056100084065075102058011 .031	07011c084070074086115072028 .006	074089101070073060080075101092078061047	0 25 30 45 60 70 75 80 85 100 105 110 120 125 120 225 240 255 275
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135 150 155 210 205 225 240 250 265 270	.027 .019013005008009014007 .024	.008025027014012016020028 .009 .073 .159 .370 .461	0.30006019003037046029030036046045036045036046045036014 .006	011059055036037054061016	025025025025029030035046029 .029 .029 .029	0.60028046060079075053050044052072086073086073060073060073060073060073	C.70056100084065075102058011 .031	07011c084070074086115072028 .006	074089101070073060060075101092078061047	0 25 30 45 60 775 80 90 90 100 120 135 150 210 225 240 255 270
DEG 25 30 45 60 75 80 85 90 105 110 120 125 150 155 150 225 240 225 240 255 270 275 280 285 290	.027 .019013005008009014007 .024 .097 .193 .458 .549 .427	.008025027014012016020028 .009 .073 .159 .370 .461 .350	0.30006019003037046029030036046049045036014036014036014036014036014045036014045014045014045014045014016016016016016016017017017018 -	0.40011059055036037054061016 .042 .111 .269 .348 .261	029029029029029029029029029029029029	0.60028046079075053050044052072086073060044023046023045015 .045 .0118 .118 .118 .112 .070	C.70056100084065075102058011 .031 .112 .111	07011c084070074086115072028 .006 .065 .060	074089101070073060080075101092078061047	0 25 30 45 60 670 75 80 85 90 105 120 125 250 255 265 275 280 285 290
DEG 25 30 45 60 77 75 80 85 90 100 120 135 150 150 215 225 240 255 240 255 260 265 270 275 280 285	.027 .019013005009014007 .024 .097 .193 .458 .549	.008025027014012016020028 .009 .073 .159 .370 .461 .350	0.30006019003037046029030036046045036045036045026014006	011059055036037054061016 .042 .111 .269 .348 .261	029029029029029029029029029029029029029029	0.60028046060075053050044048050072086073060073060073183	C.70056100084065075102058011 .031 .112	07011c084070074086115072028 .006 .065	074089101070073060075101092076061047	0 25 30 45 60 77 75 80 77 75 80 70 120 120 120 125 150 210 225 240 250 265 270 275 285 290 000 100 100 100 100 100 100 100 100 1
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135 150 150 225 240 250 240 250 260 275 280 275 280 300 315	.027 .019013005008009014007 .024 .097 .193 .458 .549 .427	.008025027014012016020028 .009 .073 .159 .370 .461 .350	0.30006019003037046029030036046049045036014036014036014036014036014045036014045014045014045014045014016016016016016016017017017018 -	0.40011059055036037054061016 .042 .111 .269 .348 .261	029029029029029029029029029029029029	0.60028046079075053050044052072086073060044023046023045015 .045 .0118 .118 .118 .112 .070	C.70056100084065075102058011 .031 .112 .111	07011c084070074086115072028 .006 .065 .060	074089101070073060080075101092078061047	0 25 30 45 60 775 80 85 90 95 1100 120 1350 120 250 250 250 255 270 285 290 3015
DEG 25 30 45 60 77 70 75 80 85 90 110 120 135 150 150 150 225 240 225 240 275 280 285 290 300 315	.027 .019013005008009014007 .024 .097 .193 .458 .549 .427	.008025027014012016020028 .009 .073 .159 .370 .461 .350	0.30006019003037046029030023010036046045045014006 035 .000 .104 .137 .203 .324 .423 .322 .421 .141 .103 .006	0.40011059055036037054061016 .042 .111 .269 .348 .261	029029029029029029029029029029029029	0.600280460790750530500460520500720860730600440230501181291181291193183183112070043016	C.70056100084065075102058011 .031 .112 .111	07011c084070074086115072028 .006 .065 .060	074089101070073060075101092076061047	0 25 30 45 60 60 70 75 85 90 100 120 125 255 265 275 265 275 280 315 330
DEG 25 30 45 60 75 80 85 90 95 100 105 110 120 135 150 150 225 240 250 240 250 260 275 280 275 280 300 315	.027 .019013005008009014007 .024 .097 .193 .458 .549 .427	.008025027014012016020028 .009 .073 .159 .370 .461 .350	0.30006019003037046029030036046045036045036045026014006	0.40011059055036037054061016 .042 .111 .269 .348 .261	029029029029029029029029029029029029	0.60028046060075053050044048050072086073060073060073183	C.70056100084065075102058011 .031 .112 .111	07011c084070074086115072028 .006 .065 .060	074089101070073060080075101092078061047	0 25 30 45 60 775 80 75 80 100 105 110 120 125 120 250 250 275 270 285 290 3015

(a) Concluded

			AL PHA	- 24.48,	PHI - 90.0,	80DY	AL DME			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	066
0	.023	.002	006	011	025	027	052	066	071	0
25			~.027			051				25
30									000	30
45			016			067			102	45
60	005	053	~.063	077	085	096	112	117		60
70			088			106				70
75	040	057	058	081	076	075	107	103		75
80			046			076			087	80
85	020	028	038	046	057	075	094	092	086	85
90	023	025	025	040	051	067			080	90
95	026	032	037	044	005	077	093	094	087	95
100			047			074			083	100
105	043	051	072	086	074	088	095	105		105
110			082			114				110
120	035	057	063	079	087	098	115	121		120
135			045			076			099	135
150									087	150
155			026			057				155
100	.016	. 902	~.010	019	030	036	056	069	069	180
205			.008			018				205
210									052	210
225			.044			.007			035	225
240	.116	.092	.076	.062	.049	.033	.005	012		240
250			.134			.077				250
255	.234	.203	.179	.156	.134	.112	.069	.035		255
260			.266			.175			.070	260
265	.572	.479	.429	.371	.336	.280	.188	.127	.132	265
270	-691	-601	.558	.479	.435	.364	· -		.185	270
275	.535	.455	.424	.361	.325	.271	.187	.123	.127	275
280	•	•	.277			.169			.068	280
285	. 249	-202	-182	.156	.136	.112	.068	.033		285
290	•••		.134			.076				290
300	.125	.092	-083	.072	.051	.036	.007	010		300
315			.041	/ -		.007	• • • •		034	315
330									054	330
335			.019			017				335

(b) Body-tail configuration

		ALPH	A = -4.85,	PHI •	0.0, 896	DY/TAIL/NO	DEFLECTIO	INS		
THETA DEG	0.10	0.20	0.30	0.40 C	P AT 1/L= 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25							.013	011	012	0 25
30 45									000	30 45
60 70							.00?	017		60
75							009	049		70 75
80 85							060	006	072 002	80 85
90									.024	90
95 100							079	077	001 .019	95 100
105							040	042	•••	105
110 120							037	035		120 110
135 150									024 016	135 150
155										155
180 205							027	038	009	190 205
210									015	210
225 240							036	036	-•050	225 240
250										250
255 260							047	042	.009	255 260
265							080	073	.002	265
270 275							064	088	.021 001	270 275
280 285							012	043	072	280 285
290										290
300 315							.007	C19	.010	300 315
330 335									004	330 335
		ALPH	.02,			DY/TAIL/NO	DEFLECTIO	INS		
THE TA DE G	0.10	0.20	0.30	0.40	P AT X/L- 0.50	0.60	0.70	0.85	0.95	THE TA DEG
0							018	030	016	0
25 30									016	25 30
45							- 031	- 033	018	45 60
60 70							021	032		
75 80							025	034		70
85							029	023	.028	70 75
90 95									.028 .047	70 75 80 85
100							029	026		70 75 80
105 110							029	026	.047 .057	70 75 80 85 90 95
120							029 017	026 032	.047 .057 .042	70 75 80 85 90 95 100 105
126							029	026	.047 .057 .042 .022	70 75 80 85 90 95 100 105 110
135 150							029 017	026 032	.047 .057 .042	70 75 80 85 90 95 100 105 110 120 135 150
150 155							029 017	026 032	.047 .057 .042 .022	70 75 80 85 90 95 100 105 110 120 135 150 155
150 155 100 205							029 017 019	026 032 032	018 019	70 75 80 85 90 95 100 125 110 120 135 150 155 180 205
150 155 100 205 210 225							029 017 019	026 032 032	018	70 75 80 85 90 95 100 125 110 120 135 150 150 205 210
150 155 100 205 210 225 240							029 017 019	026 032 032	018 019 019	70 75 80 85 95 100 105 110 120 135 150 150 205 210
150 155 100 205 210 225 240 250 255							029 017 019	026 032 032	018 019 018 019	70 75 80 85 90 95 100 120 135 150 150 150 205 212 240 255
150 155 100 205 210 225 240 250							029 017 019 010	026 032 032 033	018 019 018 019 018 016	70 75 80 85 90 95 100 125 110 127 150 205 210 225 240 255 265
150 155 100 205 210 225 240 250 255 260 265 270							029 017 019 010 018 024 031	026 032 032 033 034 032	018 019 018 019 018 016	70 75 80 85 90 95 100 120 135 150 155 180 205 215 240 255 260 265 270
150 155 100 205 210 225 240 255 260 265 275 280							029 017 019 010 018 024 031 028	026 032 032 033 034 032 026	018 019 018 019 018 016	70 75 80 85 90 95 100 120 135 150 180 205 210 225 240 255 265 270 275 280
150 150 205 210 225 240 255 260 255 260 270 275 285							029 017 019 010 018 024 031 028	026 032 032 033 034 032 026 027	018 019 018 019 018 016	70 75 80 85 90 95 100 125 110 125 150 205 210 225 240 275 260 275 280 275 280 280 280
150 150 205 210 225 240 255 265 270 275 280 285 290							029 017 019 010 018 024 031 028	026 032 032 033 034 032 026	018018018018019018016	70 75 80 85 90 95 100 120 135 150 150 205 225 240 255 260 275 260 275 280 285 290 300
150 150 205 210 225 240 255 260 265 275 280 280 280							029 017 019 010 018 024 031 028	026 032 032 033 034 032 026 027	018 019 018 019 018 016	70 75 80 85 90 95 100 125 110 125 150 205 210 225 240 275 260 275 280 275 280 280 280

ORIGINAL PAGE IS OF POOR QUALITY

(b) Continued

ALPHA = 5.04, PHI = 0.0, BODY/TAIL/NO DEFLECTIONS

THETA											
DEG	3.10	0.20	0.30	0.40	CP A"	*/L•	0.60	0.73	0.65	0.95	THETA DEG
0								034	039	010	0
25 30 45										015	25 30
60 70								040	036	024	45 60 70
75 80								~.052	052	.003	75 80
85 90								092	079	003	85 90
95								068	096	009	95
105								005	042		100 105 110
120								.007	015	.312	120
150										.301	150 155
180								.022	006	010	180
210 225										301 .011	210 225
240 250								.013	019	•011	240
255 260								009	043	- 003	250 255
265								070	095	083	260 265
270 275								085	083	006	270 275
280 285								050	045	.012	280 285
290 300								038	037		290 300
315 330 335										024	315 330 335
		A (P)									
THETA DEG			ta = 10.02,	PHI	- 0.0	, 80	OY/TAIL/	NG DEFLECTI	ons		
	0.10	0.20	0.30	PHI 3.40	CP A	, 80 T x/L= 0.50	0.60	NG DEFLECTI	O.85	0.95	THETA DEG
0 25	0.10				CP A	T X/L=				0.95	0
25 30	0.10				CP A	T X/L=		0.70	0.85	051 046	0EG 0 25 30
25 30 45 60	0.10				CP A	T X/L=		0.70	0.85	051	0 E G 2 5 3 0 4 5 6 0
25 30 45 60 70 75	0.10				CP A	T X/L=		0.70 054	0.85	051 046 039	0EG 0 25 30 45 60 70 75
25 36 45 60 70 75 80 85	0.10				CP A	T X/L=		0.70 054	0.85 057	051 046 039 136 114	0EG 0 25 30 45 60 70 75 80 85
25 36 45 60 70 75 80 85 90 95	0.10				CP A	T X/L=		0.70 054 065 141	0.85 057 071 109	051 046 039 136 114 088 106	DEG 0 25 30 45 60 70 75 80 85 90
25 30 45 60 70 75 80 85 90 95 100	0.10				CP A	T X/L=		0.70 054 065 141 119	0.85 057 071 109	051 046 039 136 114 088	DEG 0 25 30 45 60 70 75 80 85 90 95 100
25 30 45 60 70 75 80 90 95 100 105 110	0.10				CP A	T X/L=		0.70 054 065 141 119	0.85 057 071 109 108	051 046 039 136 114 088 106 100	0E6 0 25 30 45 60 70 75 80 95 90 95 100 105 110
25 30 45 60 70 75 85 90 95 100 105 110 120 135	0.10				CP A	T X/L=		0.70 054 065 141 119 090	0.85 057 071 109 108 120	051 046 039 136 114 088 106	0E6 0 25 30 45 60 70 75 80 85 90 95 100 105 110 120
25 30 45 60 70 75 80 85 90 95 100 120 120 135 150 155 180	0.10				CP A	T X/L=		0.70 054 065 141 119 090	0.85 057 071 109 108 120	051 046 039 136 114 089 106 100	0E6 0 25 30 45 60 70 75 80 85 90 100 105 110 120 135 150
25 30 45 60 70 75 80 95 90 95 100 105 110 120 135 150 155 180 205 210	0.10				CP A	T X/L=		0.70 054 065 141 119 090 .028	0.85 057 071 109 108 120 017	051046039136114089106100	0E6 0 25 30 45 60 70 75 80 95 100 105 116 120 135 150 150 205 210
25 30 45 60 70 75 85 90 95 100 105 110 120 135 150 150 205 210 225 210	0.10				CP A	T X/L=		0.70 054 065 141 119 090 .028	0.85 057 071 109 108 120 017	051 046 039 136 114 089 106 100	0E6 0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 155 180 205 210 225
25 30 45 60 75 85 90 95 100 105 110 120 135 150 150 205 215 240 255	0.10				CP A	T X/L=		0.70 054 065 141 119 090 .028 .056	0.85 057 071 109 108 120 017 .023	051 046 039 136 114 088 100 100	0E6 0 25 30 45 60 70 75 80 85 90 100 110 120 135 150 150 150 205 210 225 240 250
25 365 60 75 85 90 105 110 120 135 150 150 125 225 240 255 240 255 265	0.10				CP A	T X/L=		0.70 054 065 141 119 090 .028 .056	0.85 057 071 109 108 120 017 .023	051046039136114088106100	0E6 25 30 45 60 77 75 80 85 90 100 110 120 135 150 150 205 210 225 240 250 265
25 30 45 60 70 75 80 85 90 95 100 105 110 120 135 150 150 205 210 225 240 250 250 250 250 270	0.10				CP A	T X/L=		0.70 054 065 141 119 090 .028 .056	0.85 057 071 109 120 017 .023 .038	051046039136114089106100 .070 .049 .034104111095116	0EG 0 25 30 45 60 77 80 95 100 105 110 120 135 150 205 210 225 240 250 255 270 275
25 30 45 60 70 75 85 90 95 100 120 120 120 120 120 255 210 225 240 255 260 275 275 285	0.10				CP A	T X/L=		0.70054065141119090 .028 .056 .079 .059 .024090	0.85 057 071 109 108 120 017 .023 .038 .023 018	051046039136114088100100100100100	0E6 0 25 30 45 60 77 70 75 80 95 100 103 110 120 135 150 205 210 225 240 255 260 265 270 275 285
25 36 45 60 70 75 85 90 100 120 135 150 150 205 210 225 240 255 240 255 265 270 270 270 270 270 270 270 270 270 270	0.10				CP A	T X/L=		0.70054065141119090 .028 .056 .078 .059 .024090117	0.85057071109108120017 .023 .038 .023018121	051046039136114088100100 .070 .049 .034104111095116132	0EG 0 25 30 45 60 70 75 80 85 90 100 110 120 135 150 150 150 205 210 225 240 250 265 270 275 280 285 290 300
25 30 45 60 70 75 80 90 95 100 105 110 120 135 150 150 205 210 225 240 250 250 250 250 250 250 250 250 250 25	0.10				CP A	T X/L=		0.70054065141119090 .028 .056 .078 .059 .024090117	0.85057071109108120017 .023 .038018121117	051046039136114089106100 .070 .049 .034104111095116	0E6 25 30 45 60 77 75 80 85 90 100 105 110 120 135 150 205 210 225 240 255 260 265 270 285 280 285

ORIGINAL PAGE IS OF POOR QUALITY

		ALP	HA • 15.02.	PHI =	0. 0 , 8	DY/TAIL/N	0 08516011	ONS		
THE TA DE G	0.10	0.30	0.30	0.40	CP AT X/L=	0.60	0.70	0.65	0.95	THETA DEG
0 25 30							040	093	097	0 25
45 6 0							147	136	108 114	30 45 60
70 75							154	132		70 75
9 C 8 5							142	122	118 110	80 85
90 95							086	115	108 124	90 95
100 105							.077	.027	294	100 105
110 120 135							.123	-084	.146	110 120 135
150 155									.115	150 155
180 205 210							.154	-105	.097	180 205
225 240 250							.130	-083	•115 •142	210 225 240
255 260							.076	.027		250 255
265 270							080	121	096 127	260 265
275							139	126	112 112	270 275
280 285							154	132	117	280 285
290 300							147	135		290 300
315 330 335									113 111	315 330 335
THETA			A = 20.03,	C	P AT X/L=		DEFLECTIO			THETA
DEG	0.10	0.23	0.30	0.40	0.50	0.60	0.70	0.65	0.95	DEG
0 25 30							123	122	129	25 30
45 60							166	153	145	6 0
70 75							165	147		70 75
90 85							153	137	117 114	80 65
90 95							069	097	111 122	90 95
100 105							.141	-086	081	100 105
110 120							• Ž06	-162		750
135 150							V-2		.247 .208	135 150
155							.251	.190	.181	155
205 210							• • • • • • • • • • • • • • • • • • • •	••••	.207	205
225							210	141	.241	210 225
240 250							.218	•161		240 250
255 260							.142	.086	081	255 260
265 270							063	106	126 116	265 270
275 280							151	142	120 118	275 280
285 290							167	1-6		285 290
300 315							169	153	145	300 315
330 335									146	330 335

		ALP	HA - 25.01,	PHI =	0.0, 8	DOY/TAIL/NO	DEFLECTI	DNS		
THETA DEG	0.10	0.20	0.30	0.40	CP AT 1/L= U.50	0.60	0.70	0.85	0.95	THETA DEG
0 25							146	141	145	0
30 45 60							173	156	152 155	25 30 45 60
70 75							174	160		70 75
80 85 90							165	150	133 128	80 85
95 100							046	074	120 112	90 95
105 110							.210	.157	066	100 105
120 135 150 155							. 304	•252	.369	110 120 135 150
180 205							.364	.288	.285	155 180
210 225 240							.319	.254	.323	205 210 225 240
250 255							•555	.157		250 255
260 265							037	085	064 116	260 265
270 275							163	156	126 132	270 275
280 285 290							175	160	~-135	280 285
300 315							176	158		390 300
330 335									155 158	315 330 335
THETA DEG	0.10	ALP+	4A = -4.80, 0.30	PHI = 2	22.5, 80 PAT X/L- 0.50	DY/TAIL/ND	DEPLECTIO	NS 0.85	0.95	THETA DEG
0							.008	014	015	0
25 30									004	25 30
45 60							.007	017	.000	45 60
70 75							004	041		70 75
80 85 90							043	080	044	80 85
95 100							074	076	.045 001	90 95
105 110							040	043	.049	100 105
120 135							037	038		110
150 155										
180 205									035 023	135 150
							027	040		150 155 180
210 225							-,027	040	023 013 015	150 155 180 205 210
210 225 240 250							027	040	023 013	150 155 180 205 210 225 240
210 225 240 250 255 260							032 041		023 013 015	150 155 180 205 210 225 240 250 259
210 225 240 250 255 260 265 270							032 041 062	036	023 013 015 016	150 155 180 205 210 225 240 250 259 260 265
210 225 240 250 295 260 265 270 275 280							032 041 062 070	036 036 063 072	023 013 015 016	150 155 180 205 210 225 240 259 260 265 270 275 280
210 225 240 250 255 260 270 275 280 285 290							032 041 062 070	036 036 063 072 052	023 013 015 016 008 020 .003 014	150 155 180 205 210 225 240 250 260 265 270 275 280 285
210 225 240 250 255 260 265 270 275 285							032 041 062 070	036 036 063 072	023 013 015 016 008 020 .003 014	150 155 180 205 210 225 240 250 255 260 265 270 275 280 285

ORIGINAL PAST TO OF POOR QUALITY

		ALPI	A08,	PHI = 2	2.75 8	BDY/TAIL/40	D DEFLECTI	nw2		
THETA				С	P AT X/L+					THET
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							019	032	018	0
25										25
30									017	30
45									010	45
60							022	033		60
70										70
75							027	035		75
80									.025	80
85 90							030	024	.046	85
95									.056	90
100							031	028	.041	95
105									•022	100
110							018	033		105
120										110
135							020	033		150
150									018	135
15.									010	150
180							010	032		155
205							010	4.032	019	180
210									019	205 210
225									016	225
240							018	034	4.010	240
250							.010	03-		250
255							025	031		255
260							****	****	.016	590
265							030	027	.040	265
270							••••		.053	270
275							028	027	.049	275
280									.031	280
285							025	032		285
290										290
300							021	034		300
315									017	315
330									017	330
335										335

		ALPH	A - 4.93,	PHI = 2	2.5, 80	DY/TAIL/N	O DEFLECTI	ONS		
THETA				C+	P AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							035	040	012	0
25										25
30									013	30
45									018	45
60							038	036		60
70										70
75							046	045		75
80									.006	80
85							073	068	026	85
90									001	90
95							079	080	025	95
100									089	100
105							017	053		105
110										110
120							002	024		120
135							****	• • • •	.012	135
150									004	150
155									••••	155
180							.018	010	011	180
205								****		205
210									002	210
225									.006	225
240							.011	015		240
250							,,,,			250
255							002	033		255
260							-1002	033	057	260
265							051	092	.015	265
270							-1071	-1042	.036	270
275							081	086	.001	275
280							001	000	.053	280
285							051	- 045	.073	285
290							071	045		290
300							040	039		30(
							040	039	- 014	
315									036	315
330									022	330
335										335

TABLE 1.- Continued

(b) Continued

ORIGINAL PAGE 18 OF POOR QUALITY

		ALPH	4 . 9.92,	• 1H9	22.5,	CH/JIATYYDEB	DEFLECTIO	3NS		
THETA DEG	0.10	0.20	0.30	0.40	CP AT X		0.70	0.85	0.95	THETA DEG
0							055	056	050	0
25 30									042	25 30
45							- 043	04.0	032	45
60 70							062	068		50 70
75 80							125	110	107	75 80
85							109	064	076	85
90 95							119	088	068 090	90 95
100 105							005	042	124	100 105
110 120							.033	.004		110 120
135								,,,,	.060	135
150 155									.031	150 155
180 205							-069	.030	.029	180 205
210									.044	710
225 240							.064	.029	.056	225 240
250 255							.044	.001		250 255
260 265									056	260
270							051	-,101	097 078	265 270
275 280							132	125	066 084	275 280
285 290							139	144	***	285
300							093	072		290 300
315 330									032 051	315 330
335										335
		ΔLPH	14.92,	PHI =	22.5,	BODY/TAIL/NO	DEFLECTI	DNS		
THETA					CP AT X					THETA
DEG	0.10	0.20	0.30	0.40	0.5	0 0.60	0.70	0.85	0.95	DEG
0 25							086	093	099	0 25
30 45									093 080	30 45
60							104	109		60 70
73 75							135	106		75
80 35							118	094	112 091	80 85
ი _ს . 95							126	096	094 107	90 95
100									134	100
105 110							.024	013		105 110
120 135							-082	.051	-126	120 135
150									.084	150 155
155 180							.137	.090	.087	180
205 210									.109	205 210
225 240							.137	.092	.124	225 240
250										250
255 260							.109	.056	029	255 260
265 270							024	082	087 110	265 270
275							153	139	101 072	275 280
280 285							162	165		285
290 300							175	164		3 9 0
315 330									158 132	315 330
335										335

TABLE 1.- Continued

ORIGINAL PAGE 19' OF POOR QUALITY

(b) Continued

ALPHA . 19.90, PHI . 22.5, 30DY/TAIL/NO DEFLECTIONS

CP AT X/L= THETA 0.20 0.30 0.40 0.50 0.60 0.70 0.85 0.95 DEG

THETA DEG 0.10

0							145	136	145	0
25 30										25
45									144	30
60							135	133	128	45 60
70							••••	••••		70
75							137	114		75
90									099	80
85							123	099	080	85
90									101	90
95 100							122	104	114	95
105							.067	.027	136	100 105
110							.007	.027		110
120							.146	.113		120
135									.216	135
150									.157	150
155										155
180							.225	.168	.164	180
205 210									105	205
225									.195 .213	210
240							.230	.174	****	225 240
250								••••		250
255							.192	•130		255
260									.004	260
265							-015	053	563	265
270									099	270
275							164	~.155	097	275
280									080	280
285 290							172	166		285
300							182	172		290 300
315									176	315
330									175	330
335										335
		A1 PH	A . 24.89.	PHI =	22.5. 80	DY/TAIL/NG	DEFLECTI	DNS		
		ALPH	1A = 24.89;	PHI =		DY/TAIL/NO	DEFLECTI	DNS		THETA
THETA DEG	0.10			PHI =	CP AT X/L+	DY/TAIL/NG 0.60	0 0 6 F L E C T I	ONS 0.85	0.95	THETA DEG
THETA DEG	0.10	AL PH 0.20	0.30				0.70	0.85		DEG
DE G O	0.10				CP AT X/L+				0.95 165	0 6 9
DE 6 0 25	0.10				CP AT X/L+		0.70	0.85	165	0EG 0 25
DE 6 0 25 30	0.10				CP AT X/L+		0.70	0.85	165 178	0EG 0 25 30
DE 6 0 25 30 45	0.10				CP AT X/L+		0.70 172	0.85	165	0EG 0 25
DE 6 0 25 30	0.10				CP AT X/L+		0.70 172 149	0.85	165 178	0E6 25 30 45 60 70
DEG 0 25 30 45 60 70 75	0.10				CP AT X/L+		0.70 172	0.85	165 178 177	0E6 25 30 45 60 70 75
DEG 0 25 30 45 60 70 75 80	0.10				CP AT X/L+		0.70 172 149 140	0.85 156 151 126	165 178 177	0EG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80 85	0.10				CP AT X/L+		0.70 172 149	0.85	165 178 177 071 057	0EG 0 25 30 45 60 70 75 80 85
DEG 0 25 30 45 60 70 75 80 85	0.10				CP AT X/L+		0.70 172 149 140 123	0.85 156 151 126	165 178 177	0EG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80 85 90	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165 178 177 071 057 102	0EG 0 25 30 45 60 70 75 80 85 90
DEG 05 30 45 60 75 80 85 90 90 100	0.10				CP AT X/L+		0.70 172 149 140 123	0.85 156 151 126 100	165 178 177 071 057 102 117	0E6 0 25 30 45 60 70 75 80 95 90 95 100
DEG 25 30 45 60 70 75 80 85 90 100 110	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165 178 177 071 057 102 117	0E6 0 25 30 45 60 70 75 80 83 90 95 100
DEG 25 30 45 60 75 80 85 90 100 105 110	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165 178 177 071 057 102 117 133	0E6 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 25 30 45 60 70 75 80 85 90 105 110 120 135	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165 178 177 071 057 102 117 133	0E6 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 25 30 45 60 75 80 85 90 100 110 120 135	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165 178 177 071 057 102 117 133	0E6 0 25 30 45 60 70 75 80 90 95 100 105 110 120 135
DEG 05 30 45 60 75 80 95 90 100 1120 120 135 150	0.10				CP AT X/L+		0.70172149140123113 .118 .223	0.85 156 151 126 100 110 .075	165178177071057102117133	0E6 0 25 30 45 60 70 75 80 85 90 95 100 105 110
DEG 25 25 30 45 60 75 80 85 90 100 110 120 125 150 160	0.10				CP AT X/L+		0.70 172 149 140 123 113	0.85 156 151 126 100 110	165178177071057102117133	0E6 0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 155
DEG 25 30 45 60 70 75 80 90 105 110 120 135 155 160 205	0.10				CP AT X/L+		0.70172149140123113 .118 .223	0.85 156 151 126 100 110 .075	165178177071057102117133330254264	0E6 0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 150 205 210
DEG 25 30 45 600 75 80 85 90 100 110 120 150 150 150 205 225	0.10				CP AT X/L+		0.70172149140123113 .116 .223	0.85 156 151 126 100 110 .075 .184	165178177071057102117133	0E6 0 25 30 45 60 70 75 80 87 90 105 110 120 135 150 155 180 205 210
DEG 25 30 45 60 75 80 90 100 110 120 135 150 155 180 210 225	0.10				CP AT X/L+		0.70172149140123113 .118 .223	0.85 156 151 126 100 110 .075	165178177071057102117133330254264	0E6 0 25 30 45 60 70 75 80 90 95 100 105 120 135 150 150 205 210 225
DEG 25 25 45 60 70 75 80 85 90 100 110 125 150 150 205 225 2450	0.10				CP AT X/L+		0.70172149140123113 .116 .223	0.85156151126100110 .075 .184 .259	165178177071057102117133330254264304322	0E6 0 25 30 45 60 70 75 80 85 90 100 105 110 120 135 150 155 180 225 240 255
DEG 25 30 45 60 75 85 90 100 110 120 130 155 160 205 215 240 255	0.10				CP AT X/L+		0.70172149140123113 .116 .223	0.85 156 151 126 100 110 .075 .184	165178177071057102117133330254264304322	0E6 0 25 30 45 60 70 75 80 90 95 100 105 120 135 150 150 205 210 225
DEG 25 30 45 60 75 80 80 105 110 120 135 180 195 185 185 210 225 225 225 225	0.10				CP AT X/L+		0.70172149140123113 .116 .223	0.85156151126100110 .075 .184 .259	165178177071057102117133330254264304322	0E6 0 25 30 45 60 70 75 80 80 90 100 110 120 135 150 150 205 210 225 240 250 255 260
0 25 30 45 60 70 75 80 85 90 95 100 120 135 150 155 180 225 240 250 250 250 270	0.10				CP AT X/L+		0.70172149140123113 .118223327338290063	0.85156151126100110 .075 .184 .259 .271 .215015	165178177071057102117133330254264304322032115	0E6 0 25 30 45 60 75 80 90 105 110 120 135 150 155 180 225 240 255 260 265
0 25 30 45 45 45 45 45 45 45 45 45 45 45 45 45	0.10				CP AT X/L+		0.70172149140123113 .118223327	0.85156151126100110 .075 .184 .259	165178177071057102117133330254264304322115125	0E6 0 25 30 45 60 75 80 85 90 100 105 110 120 135 150 205 210 225 240 260 265 275
0 25 30 45 60 70 75 80 85 90 100 120 135 150 150 205 225 240 255 2605 270 275 280	0.10				CP AT X/L+		0.70172149140123113 .118 .223 .327 .338 .290 .063180	0.85156151126100110 .075 .184 .259 .271 .215015	165178177071057102117133330254264304322032115	0E6 0 25 30 45 60 77 75 85 87 90 105 110 120 135 150 205 210 255 240 255 265 270 275 280
0 25 30 45 60 70 75 80 85 90 93 100 120 135 155 180 255 260 255 260 275 285 285	0.10				CP AT X/L+		0.70172149140123113 .118223327338290063	0.85156151126100110 .075 .184 .259 .271 .215015	165178177071057102117133330254264304322115125	0E6 025 30 45 60 75 80 85 90 100 105 110 120 155 210 225 240 225 240 255 265 275 280 285 290
DEG 25 30 45 600 75 80 905 1005 1205 1	0.10				CP AT X/L+		0.70172149140123113 .118 .223 .327 .338 .290 .063180	0.85156151126100110 .075 .184 .259 .271 .215015	165178177071057102117133330254264304322042032115125126	0E6 0 25 30 45 600 75 80 90 105 100 120 135 150 155 180 225 240 250 265 270 275 285 290 300
0 25 30 45 60 75 80 85 90 95 100 120 135 155 1805 210 225 240 255 260 275 280 285 290 300 315	0.10				CP AT X/L+		0.70172149140123113 .116 .223 .327 .327 .388 .290 .063180	0.85156151126100110 .075 .184 .259 .271 .215015167170	165178177071057102117133330254264304322032115125126	0E6 0 25 30 45 60 70 75 80 90 90 100 120 135 150 225 240 250 225 240 275 280 275 280 315
0 25 30 45 60 70 75 80 85 90 100 120 135 150 155 160 205 210 255 240 255 260 265 270 275 285 290 300	0.10				CP AT X/L+		0.70172149140123113 .116 .223 .327 .327 .388 .290 .063180	0.85156151126100110 .075 .184 .259 .271 .215015167170	165178177071057102117133330254264304322042032115125126	0E6 0 25 30 45 600 75 80 90 105 100 120 135 150 155 180 225 240 250 265 270 275 285 290 300

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Continued

THETA
25 30 -013 31 43 45 47 47 47 47 47 47 47 47 47 47 47 47 47
30 45 60 60 7-035 7-016 45 60 7-037 77 77 77 77 77 77 77 77 77 77 77 77 7
60
75 80 80 81 80 81 80 81 80 81 80 81 80 81 80 81 80 81 80 81 81 80 81 80 81 80 81 80 81 80 81 80 81 80 81 81 80 81 80 81 81 81 81 81 81 81 81 81 81 81 81 81
80 85 90 90 91 90 90 91 90 92 90 93 95 96 96 97 98 98 98 99 99 99 99 99 99 99 99 99 99
90 95 100 95 100 96 107 107 108 109 109 109 109 109 109 109 109 109 109
95
105 110 1120 1120 1131 1130 1130 1131 1131 113
12C 133 130 130 131 130 130 131 131
133 135 136 137 138 139 139 139 130 131 131 130 131 131 131 131 131 132 1331 1331
135 180 205 210 205 210 227 226 240 250 250 260 270 270 270 270 270 270 270 270 270 27
205 210 227 226 240 250 260 270 270 270 277 280 285 280 280 285 280 280 285 280 280 280 280 280 280 280 280 280 280
210 225 240 230 230 230 230 230 240 230 240 250 260 260 270 260 260 270 270 270 270 270 270 270 270 270 27
24C 23C 23C 23C 23C 23C 23C 23C 23C 23C 23
295 260 265 260 275 275 275 280 285 285 280 285 280 285 280 285 280 285 280 285 280 285 280 285 280 285 280 285 280 285 280 280 280 280 280 280 280 280 280 280
260 265 270 265 270 275 275 280 275 280 285 290 300 315 330 315 330 335 ALPHA = 9.77, PHI = 45.0, BODY/TAIL/NO DEFLECTIOMS TMETA DEG
270 275 280 285 280 285 290 300 315 330 315 330 335 ALPHA = 9.77, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS TMETA DE6 0.10 0.20 0.30 0.40 0.50 0.50 0.60 0.70 0.85 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.9
280 285 290 300 315 330 335 ALPMA = 9,77, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS THETA DEG 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.85 0.95 0EG 25 30 30 30 30 30 30 30 30 30 30 30 30 30
285 290 300 315 330 315 330 335 ALPHA = 9.77, PHI = 45.0, BDDY/TAIL/NO DEFLECTIONS THETA DEG
300 315 330 335 ALPHA = 9.77, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS TMETA DE6
330 335 ALPHA = 9.77, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS THETA DEG
ALPHA = 9.77, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS THETA CP AT X/L* OCCUPANT A CONTRACT CO
DEG 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.85 0.95 DEG 052055042 0 25 30052059025 45 60052059 60 70 77 80070079 75 80073 80 95082064067 85 90093064 90 95093061074 95 100093069074 95
0
25 30033 30 45 60025 45 60 70 70 70 75 60070070079 85 90 95082082082082082082 95 100 105086086087 85 100082084087 85 100082086087 85 100086086087 85 100
025 45 60052059 60 70 70 75 60070079 75 80082084087 85 90082084042 90 95 100093061074 95 100036089019 100
70 70 77 75 80 85 90 90 90 90 100 105
75 80070079073 80 85 90082084042 90 95093061074 95 100119 100036069
85082064067 85 90042 90 95093061074 95 100119 100 105089089
95093061074 95 100119 100 105036069 105
100119 100 105036069 105
110
120 .001024 120 135 .033 135
150 .001 150
180 .044 .008 .009 180
205 210 • • • • • • • • • • • • • • • • • • •
225 .027 225
250
250 255 260 -010 260
250 255 260 265 267 268 269
250 255 260 265 265 270 275 277 277 277 277 277 277 277 277 277
250 255 260 265 265 277 277 277 277 277 277 277 278 278 278
250 255 260 265 270 277 277 280 285 280 285 280 285 280 285 280 285 280 285 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 287 280 280 280 280 280 280 280 280 280 280
250 255 260 265 265 270 277 278 278 279 279 279 279 280 285 270 286 285 270 271 272 273 274 275 275 275 277 277 277 277 277 277 277

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Continued

THETA					P AT X/L=					THET
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	C.95	DEG
0							094	099	111	0
25 30										25
45									094	30
60									069	45
70							084	091		60
75										70
80							108	092		75
85									093	80
90							090	073	075	85
95									060	90
100							090	067	101	95
105									140	100
110							028	061		105
120										110
135							.029	.003		120
150									.075	135
155									.034	150
180							•••			155
205							.094	.052	.053	180
210										205
225									.069	210
240									.075	225
250							.117	.076		240
255										250
260							.120	.068		255
265									.065	560
270							.043	026	002	265
275									045	270
240							153	152	044	275
285									086	280
290							158	153		285
300										290
							152	149		300
315									165	315
330									155	330
335										335

THETA DEG 0 25 30 45 60 70 75 80 85 90 95 100 120 120 120 125 180 205 210 225 240 250 250	0.10	0.20	0.30	0.4		0.50	0.60	0.70151121116097092009	0.85 149 137 101 082 073 041	0.95 160 172 169 073 056 074 120 149	THET. DEG 0 25 30 60 70 75 80 85 90 95 100 105
0 25 30 45 60 70 75 80 85 90 90 100 105 110 120 135 150 150 205 210 225 240 255	0.10	0.20	0.30	0.4	•0	0.50	0.60	151 121 116 097 092	149 137 101 082 073 041	160 172 169 073 056 074 120	0 25 30 45 60 70 75 80 85 90 95 100
25 30 45 60 70 75 80 85 90 100 105 120 135 150 120 205 210 225 240 255								121 116 097 092	137 101 082 073	172 169 073 056 074 120	25 30 45 60 70 75 80 85 90 95 100
30 45 60 70 75 80 85 90 95 100 110 120 125 150 155 150 205 225 240 255								116 097 092 009	101 082 073	~.169 ~.073 ~.056 ~.074 ~.120	30 45 60 70 75 80 85 90 95 100 105
45 60 70 75 80 85 90 100 110 120 135 150 205 210 225 240 250								116 097 092 009	101 082 073	~.169 ~.073 ~.056 ~.074 ~.120	45 60 70 75 80 85 90 95 100 105
60 70 70 75 80 85 90 95 100 110 120 135 150 155 205 210 225 240 250								116 097 092 009	101 082 073	073 056 074 120	60 70 75 80 85 90 95 100 105
70 75 80 85 90 90 100 110 120 125 150 150 205 210 250								116 097 092 009	101 082 073	056 074 120	70 75 80 85 90 95 100 105
70 75 80 85 90 95 100 110 120 125 150 155 220 225 240 255								097 092 009	082 073 041	056 074 120	75 80 85 90 95 100 105
80 85 90 95 100 105 110 120 135 150 155 150 205 210 225 240 255								097 092 009	082 073 041	056 074 120	80 85 90 95 100 105
85 90 100 100 110 120 135 150 150 205 210 225 240 250								092	073 041	056 074 120	85 90 95 100 105 110
85 90 100 110 110 120 135 150 150 205 210 225 240 250								092	073 041	~.074 ~.120	90 95 100 105 110
90 95 100 105 110 120 135 150 155 205 210 225 240 255								009	041	~.120	90 95 100 105 110
95 105 110 120 135 155 160 205 210 225 240 250								009	041		100 105 110
100 105 110 120 135 150 150 205 210 225 240 255										~.149	105 110
105 110 120 135 155 180 205 210 225 240 255 250										-	105 110
110 120 135 150 155 180 205 210 225 240 250 255											110
120 135 150 155 180 205 210 225 240 255 250 259								.066	-040		
135 150 155 180 205 210 225 240 250 250 250											
150 155 180 205 210 225 240 250 250 259									* * * * *	.132	135
155 180 205 210 225 240 250 255										. 08 4	150
180 205 210 225 240 250 255										• • • •	155
205 210 225 240 250 255								.160	.110	.113	180
210 225 240 250 255								••••		****	205
225 240 250 255										.132	510
240 250 255										.138	225
250 255								.199	.148	****	240
255								••••	****		250
								.208	.143		255
200								• 500	.143	.132	260
265								.107	.025	.055	265
270								.101	.023	006	270
								154	173	005	275
275									1/3	031	280
280								171		031	
285								1/1	171		285 290
290								- 171	- 148		
300								171	166		300
315										181	315
330 335										184	330

TABLE 1.- Continued

ORIGINAL PAGE 13 OF POOR QUALITY

(b) Concluded

HETA					P AT X/L=				A	THE
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DFG
0 25							165	157	16P	25 25
30									180	30
45 60							171	162	180	45 60
70 75							131	157		70 75
90									058	80
85 90							101	101	062 109	85 90
95 100							092	0 0 2	137	100
105							.012	015	159	105
110 120							.113	.087		110
135									.209	135
150 155									.149	150 155
180 205							.237	.179	.186	180
570									.208	210
225 240							. 295	• 2 ~ 7	.215	225
250										250
255 260							.309	. 236	.203	255 260
265 270							.188	.091	.126	265 270
275							153	176	.046	275
280 285							176	173	.042	280 285
290							~.175	73		2 9 C
300 315								-4.73	~.184	31:
330 335									188	330 331
		AL PI	14 • 24.46,) - IH9	90. <i>0,</i> 80	DY/TAIL/N	O DEFLECTI	DN S		
	0.10		4 4 • 24.46 , G.30		90.0, 80 CP AT K/L- 0.50	DY/TAIL/N O.60	0 DEFLECTI	ONS 0.85	0.95	THE1
DEC	0.10	ALP) 0.20			CP AT X/La				0.95 085	DEC
DEG 0 25	0.10				CP AT X/La		0.70	0.85	085	DE (
0 DEG	0.10				CP AT X/La		0.70	0.85 065		DE (2: 3(4:
0 25 30 45 60	0.10				CP AT X/La		0.70	0.85	085 086	DE (25 3 (
DEG 0 25 30 45 60 70	0.10				CP AT X/La		0.70	0.85 065	085 086 086	DE6 25 30 45 60 70
DEG 0 25 30 45 60 70	0.10				CP AT X/La		0.70	0.85	085 086 086 162 134	DE6 22 30 45 60 70 71 80
DEG 0 25 30 45 60 70 75 80 85 90	0.10				CP AT X/La		0.70 049 111 106	0.85 065 116 101	085 086 086	DE6 25 36 45 66 76 75
DEG 0 25 30 45 60 70 75 80 85 90 95	0.10				CP AT X/La		0.70 049 111 106 093	0.85 005 116 101 090	085 086 086 162 134 097	DE6 2: 3: 4: 6: 7: 8: 8: 9:
DEG 0 25 30 45 60 70 75 80 85 90 90 100	0.10				CP AT X/La		0.70 049 111 106 093 093	0.85 065 116 101 090 094 106	085 086 086 162 134 097 132	DEC 25 36 45 66 77 75 85 97 91
DEG 0 25 30 45 60 70 75 80 85 90 55 100 105	0.10				CP AT X/La		0.70 049 111 106 093	0.85 005 116 101 090	085 086 086 162 134 097 132 161	DEC 29 30 65 65 65 65 65 65 65 65 65 65 65 65 65
DEG 0 25 30 45 60 70 80 85 90 93 100 110 120 135 150	0.10				CP AT X/La		0.70 049 111 106 093 093	0.85 065 116 101 090 094 106	085 086 086 162 134 097 132	DEC 2: 33 6: 6: 6: 7: 7: 8: 9: 9: 10: 11: 12: 13:
DEG 0 25 30 45 60 70 75 80 90 105 110 120 135 150 155	0.10				CP AT X/La		0.70 049 111 106 093 093	0.85 065 116 101 090 094 106	085 086 086 162 134 097 132 161	DEC 25 30 45 60 77 75 86 87 91 100 110 121 131 151
DEG 0 25 30 45 60 70 75 80 85 90 105 110 1150 1150 1150 1150	0.10				CP AT X/La		0.70 049 111 106 093 093 092 113	0.85 065 116 101 090 094 106 120	085 086 086 162 134 097 132 161	DE6 25 30 66 67 77 77 86 81 99 100 101 121 131 155 185
DEG 0 25 30 45 60 770 779 80 85 90 90 105 110 120 135 1150 120 205 225	0.10				CP AT X/La		0.70 049 111 106 093 093 092 113	0.85 005 116 101 090 094 106 120	085 086 086 162 134 097 132 161	DE6 22 30 60 77 72 86 89 90 100 111 120 133 155 199 189 200 21
DEG 0 25 30 45 60 70 75 80 90 90 105 110 120 135 150 180 220 225 240	0.10				CP AT X/La		0.70 049 111 106 093 093 092 113	0.85 065 116 101 090 094 106 120	085 086 086 162 134 097 132 161	DE6 29 30 45 60 77 75 80 81 91 100 110 111 111 113 115 115 116 20 21 22 22
DEG 0 25 30 45 60 70 70 75 80 85 90 105 110 120 135 120 225 240 225	0.10				CP AT X/La		0.70 049 111 106 093 093 092 113	0.85 005 116 101 090 094 106 120	085 086 086 162 134 097 132 161 089 091 081	DE6 25 345 60 77 77 85 81 10 10 11 12 13 15 15 12 20 21 22 24 25 25
0 25 30 45 60 70 75 80 85 90 53 105 110 120 135 150 120 220 225 240 255 280	0.10				CP AT X/La		0.70 049 111 106 093 093 092 113 050	0.85 005 116 101 090 094 106 120	085 086 086 162 134 097 132 161	DE6 2: 3: 45 6: 77 7: 8: 9; 10: 10: 12: 13: 15: 15: 15: 20: 21: 24: 25: 25: 26: 26: 26: 26: 26: 26: 26: 26: 26: 26
DEG 0 25 30 45 60 70 70 70 80 85 90 55 100 115 1150 1150 120 225 2240 225 2260 225 2270	0.10				CP AT X/La		0.70049111106093093092113050 .008 .069 .167	0.85005116101090094106120067011 .037 .127	085 086 086 162 134 097 132 161 089 081 088 083	DE6 25 345 60 77 77 86 81 97 100 101 112 131 155 122 24 255 266 27
DEG 0 25 30 45 60 770 770 78 80 85 90 90 100 120 120 120 120 225 240 255 260 255	0.10				CP AT X/La		0.70049111106093093092113050 .008 .069 .187	0.85005116101090094106120067011 .037 .127 .123	085 086 086 086 162 134 097 132 161 089 091 081 083	DE6 25 34,9 60 77 77 85 87 10 10 11 12 13 15 13 15 16 20 21 22 22 24 25 26 27 27 27 28
0 25 30 45 45 45 45 45 45 45 45 45 45 45 45 45	0.10				CP AT X/La		0.70049111106093093092113050 .008 .069 .167	0.85005116101090094106120067011 .037 .127	085 086 086 162 134 097 132 161 089 091 083 083	DE6 29 30 45 60 77 80 90 100 101 112 133 151 151 22 24 25 26 27 27 28
DEG 0 25 30 45 60 770 775 80 85 90 95 100 120 120 120 225 240 225 240 225 240 275 280	0.10				CP AT X/La		0.70049111106093093092113050 .008 .069 .187	0.85005116101090094106120067011 .037 .127 .123	085 086 086 162 134 097 132 161 089 091 083 083	DE6 25 34,9 60 77 77 85 87 99 100 101 121 131 155 183 202 21,222 24,25 25 26 27 27 27 28

TABLE 1.- Continued ORIGINAL PAGE IS

(c) Body-wing-tail configuration

ORIGINAL PAGE IS

OF POOR QLALITY

THETA				•	CP AT X/L.					THET
DEG	0.10	0.20	0.30	0.40	0.50	0.60	. 70	0.65	0.95	DEG
0	.130	.103	.089	.069	.062	.047	.011	012	091	0
25			.065			.042				25
30									.011	30
45			.126			.043			.012	4,
60	.158	.109	.092	.070	.057	.038	.005	009		60
70			.088			.040				70
75	.146	.113	.098	.069	.059	.036	011	.010		75
60			.088			.017			.003	80
85	-160	.107	.073	.045	.025	011	.026	.017	.013	85
90	•096	.056	.025	013	035	061			.028	90
95	.026	008	028	041	051	060	093	070	.025	95
100			009			039			006	100
105	.006	.G11	007	016	006	27	048	062		105
110			002			022				110
120	.010	.004	•003	008	008	019	039	049		120
135			•006			017			032	135
150									031	150
155			•006			015				155
180	.014	.009	.006	003	.005	014	033	042	30ز ہ۔	180
205			•002			014				205
210									030	210
225			.006			016			031	225
24.0	.009	.003	003	006	008	019	036	050		240
250			003			023				250
255	.004	010	012	012	023	029	047	061		255
260			022			• 062			017	260
265	.038	011	032	045	055	061	094	C73	.021	265
270	.103	.049	.019	012	041	466			.026	270
275	.156	.107	.081	.051	.022	014	.02e	.013	.012	273
260			•106			.016			004	280
285	.145	.110	.094	.071	.054	.028	011	.010		285
290			•091			.033				90ء
300	.137	.105	.091	.078	.060	.036	•007	012		300
315			.091			.038			.017	315
330									.008	330
335			.095			.039				335

		ALPHA =	.01,	P41 =	0.0, 600	//WING/TAII	./40 DEFLE	CTIONS		
THETA					CP AT X/L=					THETA
DE G	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	D€G
Ş	.059	.041	.029	.019	.014	.008	022	035	016	0
25	•		.029			.003				25
30									.015	30
45			.075			.004			021	45
60	.090	.043	-036	.016	•012	001	026	032		60
70			.032			.005				70
75	.073	.049	.045	.022	•020	.009	029	032		75
80			.039			002			.000	80
85	.107	.074	.049	.031	.023	000	024	027	.024	85
90	.119	.086	.069	.036	.021	.000			.046	90
95	.107	.071	.050	.032	-018	.000	020	021	.0.4	95
100			.042			.002			.001	100
105	.074	.064	.038	.025	•029	•002	021	026		105
110			.036			.004				110
12	.062	.043	.035	.022	.014	.003	022	031		120
135	*		.034			.003			016	135
150									018	150
155			.033			.002				155
180	.060	.043	.033	.022	.013	.003	018	035	016	180
205			.032			.004				205
210									016	210
225			.036			.004			015	225
240	.062	.043	.032	.023	.016	.004	021	-,032		240
250	*		.037			.002				250
255	.072	.049	.035	.028	.015	.001	026	027		255
260			.041			.086			008	260
265	.112	.070	.050	.032	.019	.002	021	028	.023	265
270	.127	.082	.061	.037	•020				.044	270
275	.100	.069	.058	.035	.016	002	019	028	.025	275
280	••••	• • • •	.060			001			004	260
285	.072	.047	.039	.023	.014	001	028	029		285
290	••••	••••	.033	*		002				290
300	.064	. 242	.032	.028	.013	001	025	032		300
315	,	• • • •	.030			001	- '		017	315
330			••••						016	330
335			.036			001				335
333										

TABLE 1.- Continued ORIGINAL PAGE IS OF POCR QUALITY

(c)	Continued
()	CONCINCE

		ALPHA	• 5.04,	PH1 = 0	.o, 800	Y/W [NG/TA1	L/NO DEFLE	CTIONS		
THETA					CP AT X/L=					THETA
DEG	0.10	0.50	0.30	0.40	0.50	0.60	0.70	0.85	0.95	930
3	.010	.003	003	010	012	011	036	042	031	0
25			005			017				25
30									~.030	30
45			.047			017			036	45
60	.041	.000	002	014	017	024	041	049		60
70			013			022				70
75	001	011	005	023	022	024	056	071		75
60			028			048			014	80
85	.010	611	036	048	055	072	102	078	.024	85
90	.090	.045	.022	019	043	371			.024	90
95	1 50	.100	.071	.042	.018	014	.019	•020	.009	95
100			.087			.018			.001	100
105	.140	.114	.068	.071	.064	.030	006	.013		105
110			.068			.037				110
120	.127	.095	.089	.073	.058	.040	.006	009		120
135			860.			.040			.019	135
150									.008	150
155			.087			.041				155
180	.122	.093	.080	.074	.059	.041	.014	008	.000	180
205			.085			.044				205
210									.011	210
225			.089			.043			.020	225
240	.128	.094	.085	.074	.062	.040	.008	012		240
250		-	.089			.035				250
255	. 241	.099	.086	.074	.054	.029	009	.013		255
260			.084			.113			~.008	260
265	.145	.089	.063	.040	.015	016	.022	.014	.007	265
270	.101	.040	.013	017	049	075			.023	270
275	.023	017	024	041	059	067	096	079	.024	275
280			003			044			016	280
285	000	016	013	022	026	034	054	065		205
290			012			030				290
300	-009	002	006	003	016	024	C39	050		300
315	••••		004			022			031	315
										330
			-005			022				335
330 335			.005			022			032	

		" РНА	- 10.01,	PHI .	0.0. 800	Y/WING/TAI	L/MJ DEFLE	CTIONS		
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	026	028	030	032	032	028	056	060	060	0
25			630			036				25
30									051	30
45			.025			036			045	45
60	006	036	032	042	039	045	066	~.076		60
70			111			125				70
75	072	- 293	093	117	112	110	146	154		75
80			113			118			139	80
85	082	113	125	116	107	111	142	148	130	85
90	.044	014	047	093	115	123			104	90
95	.175	.110	.067	.028	.006	031	.032	.065	047	95
100			.122			.042			.001	100
105	.215	.185	.140	.112	.106	.071	.026	.049		105
110			.146			.086				110
120	.208	.161	•152	.125	-117	.095	.055	.024		120
135			.152			.098			.070	135
150									.051	150
155			-152			.101				155
180	.202	.182	.152	.131	.123	. 298	.068	.036	.037	180
205			.152			.104				205
210									.055	210
225			.154			.102			.071	225
240	.206	.180	.152	.126	.122	.097	.058	.023		240
250			.152			.084				250
255	•212	.174	.143	.113	.100	.071	.025	.052		255
260			.125			.140			007	260
265	.155	.097	.059	.021	. 201	032	.035	. 58	054	265
270	.057	014	059	091	122	124			111	270
275	070	111	101	10/	50	113	137	152	125	275
280	• • • •		072			118			139	280
285	075	094	105	11.	23	131	148	15C		285
290	•		115		•	139				290
30C	042	027	031	322	039	047	064	075		300
315	****		032			042			043	315
330						-			056	330
335			021			041				335

ORIGINAL PREE IS TABLE 1.- Continued (c) Continued

		46.					56.621	. 1 2443		
THE TA DE G	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	THETA DEG
0										
25	055	052	054 056	058	063	058 070	092	098	102	0 25
30									111	30
45			.004			081			117	45
60	066	145	142	152	148	146	150	136		60
70 75		3.24	155			132				70
80	133	136	119 145	143	133	125 139	~.156	163	- 150	75 80
85	132	140	~.152	140	129	133	169	154	159 164	85
90	.007	052	069	113	135	143	••••	,-	117	90
95	. 200	-131	.086	.039	.013	022	.063	.131	034	95
100			.180			.002			.021	100
105	.298	.252	.217	.182	.160	-127	.076	.103		105
110 120	304	244	.233	212	100	•152 •171		001		110
135	. 304	*504	.247 .253	.213	.168	.178	.121	.084	-146	120 135
150			1273			•1.0			.116	150
155			.254			.181				155
16C	.303	.269	.255	.225	.198	.173	.141	.103	.099	160
205			.255			.185				205
510									-124	210
225	201	345	.255	***	103	-163		000	.148	225
240 250	.304	.265	.246 .238	.216	.193	.174 .154	.128	.083		240 250
255	.298	.242	.220	.107	.156	.130	.077	.107		255
260			.182			-164			.016	260
265	-165	-101	.068	.034	.004	025	.071	.123	040	265
270	.022	048	007	114	143	149			123	270
275	122	150	129	131	142	134	~.165	159	165	275
280	- 124	- 141	101	- 146	- 151	139		- 150	166	280
285 290	134	141	142 159	145	151	-,152 -,153	156	159		285 290
300	127	148	160	~.136	159	149	153	138		300
315	***	***	062	••••	•	090			117	315
330									114	330
335			046			076				335
		ALPHA	- 19.99,	PHI = 0	.0, 8001	//WING/TAI	./NO DEFLE	CTIONS		
THETA					CP AT REL					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	078	061	090	095	103	092	127	128	135	.0
25 30			094			110			144	25 30
45			046			130			151	45
60	083	156	~.151	164	161	164	169	160		60
70			165			143				70
75	154	152	129	 3	139	132	167	171		75
90	. 160	. 143	159	- 163	- 141	152 144	- 101	- 144	170 169	80 85
45 90	150 019	163 074	166	153 125	141 143	150	183	164	120	90
95	.229	-156	.104	.059	.035	004	.114	.215	010	95
100	•••		.235	• • • • • • • • • • • • • • • • • • • •	***	.133			.052	100
105	. 390	.339	.291	.262	.238	.198	.142	.175		105
110			.316			.232				110
120	.415	.372	.339	.315	.287	.259	•205	.161	.248	150
135 150			.349						.205	
155						•272				135
180	.420	.365	. 352			•272				135 150
205			.352 .354	.341	.305		.235	.187	.182	135
210		****		.341	.305	•272 •279	.235	.187		135 150 155 180 205
225			.354	.341	.305	•272 •279 •276 •282	.235	.187	.217	135 150 155 180 205 210
	444		.354 .354 .351			.272 .279 .276 .282				135 150 153 180 205 210 225
240 250	.416	.373	.354 .354 .351 .340	.341	.305	.272 .279 .276 .282 .276 .202	.235	.187	.217	135 150 155 180 205 210 225 240
250		.373	.354 .354 .351 .340 .323	.324	.295	.272 .279 .276 .282 .276 .262 .291	•217	.161	.217	135 150 155 180 205 210 225 240 250
	.416		.354 .354 .351 .340 .323 .296			.272 .279 .276 .282 .276 .202	•217 •144		.217	135 150 155 180 205 210 225 240 250 253 260
250 255 260 265	.394	.373 .331	.354 .354 .351 .340 .323 .296 .238	.324 .274 .057	.295 .236	.272 .279 .276 .282 .276 .262 .291 .198 .179	•217	.161	.217 .250 .050	135 150 155 180 205 210 225 240 250 250 260
250 255 260 265 270	.394 .176 006	.373 .331 .116 071	.354 .354 .351 .340 .323 .296 .238 .081	.324 .274 .057 127	.295 .236 .025 151	.272 .279 .276 .282 .276 .282 .291 .198 .179 008	•217 •144 •119	.161 .181 .207	.217 .250 .050 018 129	135 150 153 180 205 210 225 240 250 250 265 265
250 255 260 265 270 275	.394	.373 .331	.354 .354 .351 .340 .323 .296 .238 .081 106	.324 .274 .057	.295 .236	.272 .279 .276 .282 .270 .262 .291 .198 .179 008	•217 •144	.161	.217 .250 .050 018 129	135 150 155 180 205 210 225 240 250 250 260 260 275
250 255 260 265 270 275 280	.394 .176 006 149	.373 .331 .116 071 164	.354 .354 .351 .340 .323 .296 .238 .081 -106 -139	.324 .274 .057 127 143	.295 .236 .025 151 159	.272 .279 .276 .282 .276 .282 .291 .198 -198 -108 -162 -145 -152	.217 .144 .119	.161 .181 .207	.217 .250 .050 018 129	135 150 155 180 205 210 225 240 250 250 260 265 270 275 280
250 255 260 265 270 275	.394 .176 006	.373 .331 .116 071	.354 .354 .351 .340 .323 .296 .238 .081 106	.324 .274 .057 127	.295 .236 .025 151	.272 .279 .276 .282 .270 .262 .291 .198 .179 008	•217 •144 •119	.161 .181 .207	.217 .250 .050 018 129	135 150 153 180 205 210 225 240 250 250 265 270 275

-.084

-.119

ALPHA . 15.01. PHI . 0.0. BODY/WING/TAIL/NO DEFLECTIONS

TABLE 1.- Continued

ORIGINAL PACT TO OF POOR QUALITY

	ALPHA = 24.99, PHI = 0.0, BODY/WING/TAIL/NO DEFLECTIONS									
THETA					CP AT X/L=					THETA
DEC	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEC
0	106	110	125	125	133	114	149	145	154	0
25			132			134				25
30									161	30
45			059			146			162	45
60	087	166	155	169	165	169	174	165		60
70			173			149				70
75	167	159	135	162	146	138	176	179		75
80			168			164			166	60
65	160	169	174	~.164	152	155	189	174	164	85
90	040	087	090	130	144	151			121	90
95	.250	.183	-134	.086	-064	.019	-179	• 309	.018	95
100			- 306			.190			.092	100
105	.490	.433	.307	.355	.325	.275	.210	.267		105
110			.423			.323				110
120	.539	.491	.457	.434	.399	. 302	• 304	.253		120
135			. 472			.301			.373	135
150									.321	150
155			.479			.397				155
180	.553	.512	-481	.470	.427	.385	.343	-286	.286	180
205			.482			. 392				205
210									. 336	210
225			.477			. 385			.376	225
240	.542	.492	-462	.442	-409	- 364	•320	.253		240
250			.434			.324				250
255	.499	.426	. 394	.366	-330	.279	•275	.275		255
260			-311			.229			.091	260
265	.191	-142	.106	.083	.954	.016	-186	- 303	.012	265
270	031	085	116	131	152	165			136	270
275	162	172	148	154	172	155	182	179	161	275
280			117			164			166	280
285	167	165	164	167	169	168	177	175		285
290			178		-	171	•			290
30C	159	170	179	147	178	170	178	165		300
315			173		_	162	-		161	315
330									167	330
335			122			~.146				335

	ALPHA . 4.95, PHI . 22.5, BODY/WING/TAIL/NO DEFLECTIONS										
THETA	CP AT X/L=									THETA	
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.65	0.95	DEC	
0	-013	.004	003	009	011	010	035	043	033	0	
25			003			016				25	
30									027	30	
45			.046			015			030	45	
60	.044	.004	.001	012	014	021	038	046		60	
70			009			017				70	
75	.005	003	001	017	016	018	050	063		75	
RC .			~. 0Z0			039			026	80	
85	.013	012	032	040	046	056	091	072	.009	85	
90	.0.0	.027	.007	028	051	071			.012	90	
95	-126	.079	.048	.022	-000	030	-006	.010	001	95	
100			.064			.003			021	100	
105	.125	. 099	.070	.055	.050	.017	015	•002		105	
110			.072			.025				110	
120	.117	.085	.077	.061	.048	.031	-•002	~.020		150	
135			.079			.034			.016	135	
150									.003	150	
155			.081			.036				155	
180	.116	.G88	.081	.067	•055	.036	•010	~.011	002	100	
205			.082			-041				205	
210									.008	210	
225			.089			-042			.014	225	
240	.125	- 093	.089	.074	.063	.042	.010	~.005		240	
250			.097			.039				250	
255	.146	• 105	.096	.080	.061	-036	003	.016		255	
260			.098			.034			•050	260	
265	.16	-110	.087	-661	.036	•002	.033	.016	-016	265	
270	.13.	.067	.042	.008	024	056		_	-046	270	
275	.047	• 005	009	032	055	065	096	074	.052	275	
280			001			046			-013	280	
285	.007	013	014	023	030	035	055	064		285	
290			014			029				290	
300	.011	004	008	003	016	025	041	051		300	
315			004			-•055			036	315	
330									036	330	
335			•005			021				335	

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Continued

		ALPHA	. 9,94,	PHI - 22	.5, 800	Y/WING/TAI	L/NO DFFLE	CTIONS		
THETA					CP AT #/L=					THETA
₽€¢	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.65	0.95	0 F 6
0	024	027	028	031	~.033	029	055	060	062	0
25			027			034				25
30									050	30
45			.026			033			u.l	45
60	.008	027	022	032	033	042	061	069		60
70			062			053				70
75	0.3	087	088	115	113	104	127	127		75
80			101			109			108	80
85	007	096	102	699	092	097	130	125	090	65
90	006	062	064	113	105	098			063	90
95	.116	.059	-014	021	045	072	011	.030	062	95
100			.075			-001			054	100
105	.172	.142	.193	.074	.067	-034	004	.013		105
110			.113			.054				110
150	.179	-152	.125	.099	.090	.071	.033	.004		120
135			.131			-980			.057	135
150									.031	150
155			.135			- 086				155
180	.189	.168	.138	-120	.113	-089	.059	.028	.034	100
205			.144			-098				205
210									.056	210
552			.151			-101			.067	225
240	-210	.185	.154	.132	.130	-105	-063	.037		240
250			.162			.099				250
255	.233	.197	.161	.13é	.127	-092	-044	.071		255
260			.157			.080			.057	260
265	-518	-159	.114	-076	.056	-015	.070	.069	017	265
270	.127	.051	.006	035	074	110			059	270
275	019	075	093	114	126	122	139	139	075	275
200			069			122			061	280
205	071	084	094	109	116	125	143	148		205
290			099			126				290
300	046	068	002	063	078	080	091	079		300
315			032			043			043	315
330									061	330
335			021			042				335

		ALPHA	- 14.93.	PHI • 22	.5. 8001	//WING/TAI	L/MO DEFLE	CTIONS		
THETA					CP AT 1/L+					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	055	051	053	055	059	053	086	093	103	٥
55			051			062				25
30									097	30
45			.007			063			082	45
60	016	050	056	072	078	087	105	108		60
70			150			119				70
75	135	133	116	133	118	109	135	155		75
80			131			125			145	80
65	134	132	132	124	113	113	137	135	122	85
90	065	112	114	131	123	113			103	90
95	.101	.039	002	039	058	086	014	.075	082	95
100			.094			.011			064	100
105	• 550	.180	.142	.114	.100	.064	.027	.017		105
110			.167			.096				110
120	• 252	-214	.194	.166	.145	.126	.084	.051		120
135			.212			.144			.123	135
150									.086	150
155			.223			.156				155
180	.279	.248	.232	.206	.160	.162	.127	.089	.097	180
205			.242			.176				205
210									.120	510
225			.251			.102			.139	225
240	.314	.275	.258	.225	.205	.186	-130	.103		240
250			.268			.161				250
255	.341	.285	.265	.224	.199	.171	.112	.147		255
260			.250			.148			.107	260
265	.274	.202	.167	.120	.087	.051	.139	.146	.023	265
270	.130	.046	.000	040	080	114			086	270
275	060	108	116	138	160	145	161	162	066	275
280	· · · · ·		103			148			052	280
285	126	133	137	145	150	150	163	165		285
290			146			153				290
300	102	128	145	129	164	162	174	161		300
315			144	-		159			156	315
330			_						134	330
335			040			07.				335

TABLE 1.- Continued ORIGINAL PAGE IS OF POOR QUALITY

		ALPHA	- 19.95,	PHI . 22	.5. 800	A\# [M&\±VI	L/NO DEFLE	CHIONS		
THETA					CP AT X/L=					THETA
0€6	0.10	0.20	0.30	0.4C	0.50	0.60	0.70	0.85	0.95	DEG
9	084	382	097	110	130	120	153	145	155	٥
25			000			098				25
30									150	30
45			019			096			134	45
60	052	110	105	116	117	123	137	135		60
70			156			128				70
75	153	147	124	142	122	111	137	~.157		75
80			145			130			130	80
85	147	146	146	132	119	117	142	143	114	85
90	106	136	127	136	129	118			112	90
95	.094	.031	006	042	058	084	-002	-121	088	95
100			.120			.034			071	100
105	. 276	.230	.189	.104	.147	.105	.070	.041		105
110			.226			-150				110
120	. 337	.295	-266	.246	.220	.194	.148	-113		120
135			.293			.224			.215	135
150									.164	150
155			-310			.242				155
100	. 3R6	.353	.324	.311	.275	.252	.212	.167	.183	100
205			.339			.270				205
210									.221	210
225			.352			.280			.235	255
240	.434	. 392	- 361	.343	.311	-286	.233	-192		240
250			.370			.280				250
255	.461	.398	.364	.336	.296	.264	.197	. 245		255
260			.336			.231			.161	260
265	.329	. 258	.214	.177	-134	.397	• 232	.242	.061	265
270	.134	.051	.001	033	075	111		-	122	270
275	084	127	130	149	174	159	164	168	113	275
280			116			162			104	280
285	155	155	156	162	165	164	173	170	••	205
290			166			166				290
300	134	~.152	165	140	173	171	185	173		300
315			170			173			174	315
330			7						179	330
335			151			173			•••	335
										7,7

THETA										
				(P AT X/L.					THETA
DEG	0.10	0.50	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEC
0	152	155	172	167	175	~.147	175	159	167	0
25			~.131			161				25
30									176	30
45			~.036			120			178	45
60	075	137	126	137	133	137	150	154		60
70			157			125				70
75	162	150	125	143	122	112	140	156		75
80			~.150			130			092	80
85	153	149	150	134	119	115	144	145	101	85
90	129	146	131	137	126	116			114	90
95	.090	.033	001	037	048	074	.032	.101	085	95
100			.154			.069			066	100
105	.332	.288	.246	•223	.205	.158	.121	-085		105
110			. 298			.214				110
120	.427	. 386	.356	.339	.308	.271	.227	.187		120
135			. 395			.312			. 336	135
150									.271	150
155			.+20			.340				155
180	.509	. 469	.440	.431	.388	. 356	.312	• 262	· c 73	190
205			.461			.380				205
210									.334	210
225			. 476			.391			.348	225
240	.571	.523	.490	.475	.434	. 396	.341	.309		240
250			.497			. 390				250
255	.594	.524	.486	.460	.412	. 369	.297	- 362	_	255
260			.443			.323			.218	590
265	.387	.317	.273	.237	.193	.150	.339	.355	-108	265
270	.141	.059	.008	023	066	105			125	270
275	101	138	137	153	179	168	169	175	173	273
280			125			175			174	200
285	168	168	169	175	-,178	177	~.178	174		281
290			180			177				290
30C	٠.	166	179	150	103	177	187	173		300
315			177			179			180	315
330									185	330
335			158			180				335

TABLE 1.- Continued

ORIGINAL PAGE IS OF POOR QUALITY

		ALPHA	- 4.75,	PHI - 45	.O BOD	Y/W[NG/TA]	L/MO DEFLE	CTIONS		
THETA					CP AT X/L-					THETA
990	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	.023	.011	.004	003	005	006	033	041	029	0
25			.003			012				25
30									022	30
45			.049			010			022	45
63	.053	.013	.008	004	006	015	033	043		60
70			.001			009				70
75	.019	.011	.011	007	004	007	039	052		75
80			005			024			035	80
e 5	-026	.005	012	020	023	032	068	056	004	85
90	.0e2	.026	.013	017	034	047			.005	90
95	-104	• 062	.036	.014	007	032	002	001	006	95
100			.050			006			035	100
105	-104	.081	.056	.040	.035	.004	029	009		105
110			.060			.012				110
150	-100	.072	.066	.048	.035	.018	013	030		120
135			.070			.022			.011	135
150									004	150
155			.071			.025				155
180	.101	.080	.073	.057	.044	.027	.002	018	008	1 80
205			-074			.031				205
210									000	210
225			.082			.033			.003	225
240	.114	+092	.081	.067	.057	.035	.006	004		240
250			.093			.037				250
255	.140	.108	.095	.078	.061	.038	•002	.013		255
260			-104			.040		_	.043	260
265	.186	-132	.107	.079	.057	.024	.020	.014	.025	265
270	-164	.105	.079	.043	.014	018			.084	270
27:	.084	.037	.024	003	023	041	073	071	.092	275
280			.020			036			.049	280
285	.027	.004	.001	013	020	032	050	055		285
290	_		002			024				290
300	.023	-006	.001	.003	009	021	036	046		300
315			.004			~.018			040	315
330			•						037	330
335			-012			018				335

		ALPHA	- 9.79,	PHI • 45.	.O, BGO	Y/WING/TAT	L/NO DEFLE	CTIONS		
THETA				(P AT X/L=					THETA
DEC	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	013	018	021	026	029	025	052	060	060	0
25			019			029				25
30									042	30
45			.033			026			035	45
60	.025	015	010	020	023	031	050	059		60
70			018			028				70
75	031	032	-,027	038	031	035	069	090		75
80			070			085			085	80
85	048	061	070	056	063	067	092	079	048	85
90	025	070	068	075	076	072			027	90
95	067	-014	022	053	071	089	036	.006	046	95
100			.032			037			073	100
105	.123	.095	.059	.033	.029	004	037	022		105
110			.072			.017				110
120	.138	.111	.087	.062	.055	.036	•001	023		120
135			.098			.048			.035	135
150									.008	150
155			.104			.057				155
180	.157	.138	.110	.074	.085	.063	.036	.008	-022	160
205			.115			.074				205
210									.034	210
225			.127			.080			.039	225
240	.193	.168	.135	.125	.114	.088	.050	.039		240
250			.152			.094				250
255	.235	. 196	.160	-147	.128	.097	.048	-065		255
260			.172			.097			.107	260
265	.276	.212	.161	.134	.106	.062	.089	- 069	002	265
270	.210	.131	.084	.043	.001	041			.035	270
275	.060	002	027	057	092	114	137	135	.092	275
280			048			115			.055	280
285	~.031	062	071	082	093	106	134	112		285
Z 90			066			094				290
300	027	044	054	052	068	062	071	078		300
315			041			045			071	315
330									063	330
335			018			040				335

TABLE 1.- Continued ORIGINAL PAGE SO OF POOR QUALITY

(c) Continued

ALPHA . 14.75, PHI . 45.0, BODY/WING/TAIL/NO DEFLECTIONS

THETA					CP AT X/L+					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	050	048	050	053	066	063	094	105	112	0
25 30			043			059			091	25 30
45			.014			054			071	45
60	.005	034	033	045	049	062	083	091		60
70			050			064				70
75	101	102	078	090	081	079	138	103	_	75
80 85	096	100	- 107 100	090	082	094 082	084	085	lc 086	80
90	106	102	082	092	088	080	064	007	053	65 90
95	.020	034	064	095	096	088	066	.005	085	95
100			.019			050			115	100
105	.132	.099	-067	.040	-032	001	031	049		105
110			.094			-031				110
120 135	.175	.141	.127 .150	.096	-061	.064 .087	.028	.003	.079	120
15¢			•170			•00•			.046	135 150
155			.165			.103				155
180	•555	.194	.179	.151	.134	-115	.084	.052	.067	160
205			.193			-132				205
510									.063	210
225 240	.283	.247	.211 .229	.195	.188	.144	***	103	.090	225
250	* 5 6 3	.241	.253	.143	•100	•158 •170	.116	.103		240 250
255	.343	.291	.267	.225	.213	.175	-119	.137		255
260			.281			.177		•	.180	260
265	.372	.296	.251	.199	.175	.123	.175	.142	.034	265
270	.260	.166	+124	.063	-018	030			008	270
275	.050	019	040	072	104	123	141	137	011	275
280 285	071	104	072 118	133	143	151 148	- 144	- 124	015	200
290	-,011	104	124		~.143	144	164	136		285 2 9 0
300	076	096	111	104	132	136	154	132		300
315			102			119			152	315
330									154	330
335			079			101				335
			a 10 74	0ut - 45	O. BODY	, outher tate	. AND DEE! S.	- T T COM C		
		ALPHA	• 19.74,	PHI • 45		//WING/TAI	L/NO DEFLE	CTIONS		
THETA	0.10			(CP AT X/L=				0.05	THETA
THETA DEG	0.10	А {РНА 0.20	• 19.74, 0.30			7/WING/TAI(0.60	L/NO DEFLEC	0.05	0.95	THE TA DEG
	0,10 098			(CP AT X/L=				0.95 149	
DEG 0 25		0.20	0.30	0.40	CP AT X/L- 0-50	0.60	0.70	0.05	149	0E6 0 25
DEG 0 25 30		0.20	0.30 129 123	0.40	CP AT X/L- 0-50	0.60 119 124	0.70	0.05	149 162	DEG 0 25 30
0 25 30 45	098	0.20	0.30 129 123 005	0.40	CP AT X/L- 0-50 137	0.60 119 124 108	0.70 147	0.05 130	149	DEG 0 25 30 45
DEG 0 25 30 45 60		0.20	0.30 129 123 005 064	0.40	CP AT X/L- 0-50	0.60 119 124 108 091	0.70	0.05	149 162	0 25 30 45 60
0 25 30 45	098	0.20	0.30 129 123 005	0.40	CP AT X/L- 0-50 137	0.60 119 124 108	0.70 147	0.05 130	149 162	DEG 0 25 30 45
DE6 0 25 30 45 60 70 75	098	0.20 115 062 119	0.30 129 123 005 064 090 095	0.40 126 078 111	CP AT X/L= 0-50 137 08C 096	0.60119124108091050087092	0.70 147 119 113	0.05 130 136 111	149 162 159	DEG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80 85	098 017 134 121	0.20 115 062 119 115	0.30129123005004090095115112	126 076 111 098	CP AT X/L= 0.50 137 08C 096 087	0.60 119 124 108 091 050 087 092 089	0.70 147 119	0.05	162 159 084 068	DEG 0 25 30 45 60 70 75 80
DEG 0 25 30 45 60 70 75 80 85	098 017 134 121 140	0.20 115 062 119 115 114	0.30129123005006090095115112	078 111 098 095	CP AT X/L- 0-50 137 08C 096 087 089	0.60 119 124 108 091 050 087 092 089	0.70 147 119 113 090	0.85 138 136 111 095	162 159 084 068 058	DEG 0 25 30 45 60 70 75 80 85
0 25 30 45 60 70 75 80 85 90 95	098 017 134 121	0.20 115 062 119 115	0.30129123005064090015115112090	126 076 111 098	CP AT X/L= 0.50 137 08C 096 087	0.60 119 124 108 091 050 087 092 089	0.70 147 119 113	0.05 130 136 111	149 162 159 084 068 058	DEG 0 25 30 45 60 70 75 80 85 90
DEG 0 25 30 45 60 70 75 80 85 90 95	098 017 134 121 140	0.20 115 062 119 115 114 063	0.30129123005004090095115090085018	076 111 098 107	08C 08C 087 089 094	0.60 119 124 108 091 087 092 085 082 086 087	0.70 147 119 113 090	0.85 138 136 111 095	162 159 084 068 058	DEG 0 25 30 45 60 70 75 80 85 90
0 25 30 45 60 70 75 80 85 90 95 100 105 110	096 017 134 121 140 014	0.20 115 062 119 115 114 063	0.30129123005064090095115112090085 .014 .079	078111098095107	08C 08C 086 087 089 089	0.60119124108091050087092085085047	0.70 147 119 113 090 073	0.05 136 136 111 095 .015 039	149 162 159 084 068 058	DEG 0 25 30 45 60 70 75 80 95 100 105 110
0 25 30 45 60 77 60 75 80 85 90 95 100 105 110 120	096 017 134 121 140 014	0.20 115 062 119 115 114 063	0.30129123005004090115112090085115112090085119119	076 111 098 107	08C 08C 087 089 094	0.60119124108091050087092085085086087	0.70 147 119 113 090 073	0.05 138 136 111 095	149 162 159 084 058 058 099	DEG 0 25 30 45 60 70 75 80 85 90 105 110 120
DE6 0 25 30 45 60 75 60 85 90 95 100 105 110	098 017 134 121 140 014	0.20 115 062 119 115 114 063	0.30129123005064090095115112090085 .014 .079	078111098095107	08C 08C 086 087 089 089	0.60119124108091050087092085085047	0.70 147 119 113 090 073	0.05 136 136 111 095 .015 039	149 162 159 084 008 058 099 137	DEG 0 25 30 45 60 70 75 60 85 90 95 100 110 120
0 25 30 45 60 70 75 80 85 90 95 100 120 135 150	098 017 134 121 140 014	0.20 115 062 119 115 114 063	0.30129123005004090095115090085112090085 .014 .079 .119	078111098095107	08C 08C 086 087 089 089	0.60119124108091050087092085087096047 .014 .058 .103	0.70 147 119 113 090 073	0.05 136 136 111 095 .015 039	149 162 159 084 058 058 099	DE6 0 25 30 45 60 70 75 80 85 90 100 110 120 135
DE6 0 25 30 45 60 75 80 85 90 95 100 105 112 135 150	096 017 134 121 140 014 .146 .220	0.20115062119115114063 .113	0.30129123005004090095115112090085116119119	0.40126078111098095107 .058 .143	137086086087089094 .048	0.60119124108091050087092085082086047 .014 .056 .103 .138	0.70147119113090073011	0.85 136 136 111 095 .015 039	149162159084058099137	0 25 30 60 70 75 60 60 95 100 105 115 150 155
0 25 30 45 60 70 75 80 85 90 95 100 120 135 150	098 017 134 121 140 014	0.20 115 062 119 115 114 063	0.30129123005004090095115090085112090085 .014 .079 .119	078111098095107	08C 08C 086 087 089 089	0.60119124108091050087092085087096047 .014 .058 .103	0.70 147 119 113 090 073	0.05 136 136 111 095 .015 039	149 162 159 084 008 058 099 137	DE6 0 25 30 45 60 70 75 80 85 90 100 110 120 135
0 25 30 45 60 70 75 80 85 90 95 100 105 110 120 135 150 205 210	096 017 134 121 140 014 .146 .220	0.20115062119115114063 .113	0.30129123005006090095115112090085115112090085119090085119090085014079119090085014079085014079085014079085014079085014079085090090 -	0.40126078111098095107 .058 .143	137086086087089094 .048	0.60119124108091050087092085047 .014 .056 .103 .139 .164 .182	0.70147119113090073011	0.85 136 136 111 095 .015 039	149162159084068058099137	0 25 30 60 70 75 80 85 90 90 105 110 120 135 150 20 105 210
DE6 0 25 30 45 60 70 75 80 83 90 95 100 120 135 150 150 205 210 225	098017134121140014 .146 .220	0.20115062119115114063 .113 .187	0.30129123005064090095115090095112090085114079119165199225248272	0.40126078111098095107 .058 .143	13708C096087089094 .048 .123	0.60119124108091050087092085085047 .014 .056 .103 .139 .164 .182 .206	0.70147119113090073011 .006	0.05136136111095 .015039 .040	149162159084068058099137	0 25 30 45 60 70 75 80 85 90 100 120 135 150 205 225
0 25 30 45 45 45 45 45 45 45 45 45 45 45 45 45	096 017 134 121 140 014 .146 .220	0.20115062119115114063 .113	0.30129123005004090095115112090085115119085119255248272	0.40126078111098095107 .058 .143	137086086087089094 .048	0.60119124108091087087092086087086087086087086087086087086087086087086087086087086087086087086087086087086087086087086087086087087086087086087086087087086087 -	0.70147119113090073011	0.85 136 136 111 095 .015 039	149162159084068058099137	0 25 30 60 75 60 77 75 80 100 100 120 135 150 20 210 225 240
DE6 0 25 30 45 60 70 75 80 83 90 95 100 120 120 125 150 225 240 225	098017134121140014 .146 .220 .296	0.20115062119115114063 .113 .187	0.30129123005006090095115112090085 .014 .079 .119 .165 .199 .225 .248 .272	0.40126078111098095107 .058 .143	08C 08C 08C 087 089 094 .048 .123	0.60119124108091050087092085087087082086047014056103139164182206226226226	0.70147119113090073011 .066	0.85136136111095 .015039 .040 .111	149162159084068058099137	0 0 25 30 0 70 75 80 85 90 90 90 105 110 120 135 150 205 210 225 240 250
0 25 30 45 45 45 45 45 45 45 45 45 45 45 45 45	098017134121140014 .146 .220	0.20115062119115114063 .113 .187 .273	0.30129123005004090095115112090085115119085119255248272	0.40126078111098095107 .058 .143	08C 08C 08C 087 089 094 023 201	0.60119124108091050087092085087014050103138164182206226248225273275	0.70147119113090073011 .006	0.05136136111095 .015039 .040	149162159084068058099137	0 25 30 60 75 60 77 75 80 100 100 120 135 150 20 210 225 240
DE6 0 25 30 45 60 70 75 80 85 90 95 100 105 110 120 135 150 205 210 225 240 255 260 265	098017134121140014 .146 .220 .296	0.20115062119115114063 .113 .187 .273	0.30129123005066090095115112090085 .014 .079 .119 .165 .199 .225 .248 .272 .300 .331 .367 .306 .400 .351	0.40126078111098107 .058 .143 .228	CP AT X/L- 0.5013708C096087089094 .048 .123 .201 .278 .316	0.60119124108091050087092085087095085087014056037014056027014056027014056027014056027 -	0.70147119113090073011 .066	0.85136136111095 .015039 .040 .111	149162159084008058099137164104130149156	DE6 0 25 30 45 60 770 75 80 85 90 95 110 120 125 150 209 210 225 240 255 260
0 E 6 0 2 5 3 0 0 5 6 0 0 7 5 6 0 0 7 5 6 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 5 0 1	096017134121140014 .146 .220 .296	0.20115002119115114003 .113 .187 .273	0.30129123005064090095115112090085116079119165199225248272300331367386400351166	0.40126076111096095107 .058 .143 .228 .295 .338 .292	CP AT X/L- 0.5013708C096087089094 .048 .123 .201	0.60119124108091087092085082086014 .03138164826226226273276201007	0.70147119113090073011 .066 .118	0.05136136111005 .015039 .040 .111 .187 .230 .240	149162159084008058099137144104130149156253114013	0 25 30 45 60 77 75 80 70 77 90 95 100 120 135 150 120 225 240 255 260 265 270
DE6 0 25 30 45 60 75 80 85 90 95 100 105 1120 135 150 155 180 205 210 225 240 255 260 265 275	098017134121140014 .146 .220 .296	0.20115062119115114063 .113 .187 .273	0.30129123005006090095115112090085115119085119085119085119085119085014079119085014079119085085014079119085085014079085014079085014079085085086086086086086086	0.40126078111098107 .058 .143 .228	CP AT X/L- 0.5013708C096087089094 .048 .123 .201 .278 .316	0.60119124108091050087092085087014056103138164182206268265273276201007120	0.70147119113090073011 .066 .118	0.85136136111095 .015039 .040 .111	149162159084068058099137144104130149156253114013005	DE6 0 25 30 45 60 70 75 80 85 90 90 105 1100 120 135 150 200 205 240 250 250 260 275
DE6 0 25 30 45 60 77 75 80 83 90 100 120 135 150 155 180 205 210 255 240 250 255 260 270 275 280	096017134121140014 .146 .220 .296 .384 .463 .472 .310 .042	0.20115002119115114063 .113 .187 .273 .352 .411 .397 .212025	0.30129123005064090095115112090085116079119165199225248272300331367386400351166	0.40126078111098095107 .058 .143 .228 .295 .338 .292 .102074	CP AT X/L- 0-50137080096087089094048123201278316299045104	0.60119124108091050087092089087014056 .103 .139 .164182 .206 .226 .248 .265 .273 .276 .201007120	0.70147119113090073011 .066 .118 .198 .209 .205131	0.05136136111095 .015039 .040 .111 .107 .230 .240146	149162159084008058099137144104130149156253114013	0 25 30 45 60 70 75 80 60 85 90 91 100 120 135 150 205 225 240 255 260 270 275 280
DE6 0 25 30 45 60 77 75 80 85 90 95 100 120 135 150 120 225 240 225 240 255 260 275 280 275 280 280 270 275	096017134121140014 .146 .220 .296	0.20115002119115114003 .113 .187 .273	0.30129123005006095115115119085014 .079 .119 .105 .19925 .248 .272 .300 .331 .367 .386 .400 .351 .106043083135	0.40126078111098095107 .058 .143 .228 .295 .398 .292 .102074150	CP AT X/L- 0.5013708C096087089094 .123 .201 .278 .316 .259 .045104	0.60119124108091050087092085097014056103138164182206226 -	0.70147119113090073011 .066 .118 .198 .209 .205131178	0.85136136111095 .015039 .040 .111 .187 .230 .240146153	149162159084068058099137144104130149156253114013005	DE6 0 25 30 45 60 70 75 80 85 90 9110 120 135 150 205 225 240 255 260 275 280 285
0 E 6 0 25 30 45 45 45 45 45 45 45 45 45 45 45 45 45	096017134121140014 .146 .220 .296 .384 .463 .472 .310 .042	0.20115002119115114063 .113 .187 .273 .352 .411 .397 .212025	0.30129123005004090095115112090085116079119165199248272300331367386400351106043083135	0.40126078111098095107 .058 .143 .228 .295 .338 .292 .102074	CP AT X/L- 0-50137080096087089094048123201278316299045104	0.60119124108091087087082086082086014 .03 .138 .164 .182 .206 .226 .248 .265 .273 .276 .201007120159	0.70147119113090073011 .066 .118 .198 .209 .205131	0.05136136111095 .015039 .040 .111 .107 .230 .240146	149162159084068058099137144104130149156253114013005	0 25 30 45 60 77 75 80 85 80 105 110 120 135 150 205 240 250 270 275 285

-.151

-.119

TABLE 1.- Continued

THETA 0E6 0.10 0.20 0.30 C 40 0.50 0.60 0.70	0163 0 25 170 30 174 45 4 60 70 75 075 80
013113815515216413716715 25152156 30 4506308412815615517516 70115108108108108186 80127116112100088087094 85127116112100088087094 95035075092108095087068 .06 100162 .132 .100 .084 .075 .040 .0140	0163 0 25 170 30 174 45 4 60 70 75 075 80
25	25 170 30 174 45 4 60 70 70 4 75 075 80
30 45063084128155165157115108115108115108127116114100114100114100084087088087088087088087088087088087088087088087088087088087088087088087088087088087088087088087088088087088088087088088087088088088087088	25 170 30 174 45 4 60 70 75 075 80
45 6003609308412815616517516 70115108108108 7513912010011109308413016 80114094087087094130 90140114096095090084 95035075092108095087068 .07 100162 .132 .100 .084 .075 .040 .0140	174 45 4 60 70 4 75 075 80
6003609308412815616517516 70115108 7513912011109308413016 80114094094 8512711611210008808709413 90140114086095080084 95035075092108095087068 .06 100021034	4 60 70 75 075 80
70	70 75 075 80
7513912010011109308413016 80114094087087087 90140114086095090084 95035075092108095087068 .07 100162 .132 .100 .084 .075 .040 .0140	4 75 075 80
801260940940950960970961271161121000880870941210008808709508609508609508708809508706809508706809508706809508706809508706809508706809508706809508708609508708609508708609509508609509508609508609509509508609509	075 80
8512711611210008808709411 90140114096095090084 95035075092108095087068 .01 100034 105 .162 .132 .100 .084 .075 .040 .01401	
90140114086095090084 95035075092108095087068 .01 100034 105 .162 .132 .100 .084 .075 .040 .0140	1 - 000 - 66
95035075092108095087068 .00 100021034 105 .162 .132 .100 .084 .075 .040 .0140	C =+U74 65
100 .021034 105 .162 .132 .100 .084 .075 .040 .0140	092 90
105 -162 .132 .100 .084 .075 .040 .0140	0119 95
	152 100
	3 105
110 .152 .093	110
120 .267 .235 .215 .199 .176 .152 .116 .01	
135 .263 .199	.231 135
150	•175 150
155 .298 .233	155
180 .380 .352 .330 .318 .284 .259 .224 .10	
205 .361 .294	205
210	.226 210
225 .397 .323	.238 225
240 .500 .460 .434 .415 .383 .356 .297 .20	
.479 .381	250
255 .597 .536 .504 .467 .431 .391 .313 .30	
260 .570 .388	.324 260
265 .581 .501 .449 .398 .350 .293 .365 .39	
270 .366 .261 .207 .147 .079 .026	025 270
275 .03902304106909911413012	
090161	027 280
28511213714615916817218415	
164173	290
3001311521671421741691611	
315160166	+.177 315
330	180 330
335139167	335

		ALPHA .	4.62,	PHI = 67	.5, 800	Y/WENG/TAI	L/NO DEFLE	CTIONS		
THETA					CP AT X/L.					THETA
DEG	0.10	0.50	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
o	.036	.019	.013	.005	.002	002	031	041	027	0
25			-010			008				25
30									017	30
45			.053			006			016	45
60	.063	.021	.015	.003	001	011	032	041		60
76			.010			005				70
75	.035	.022	.020	.001	.003	002	034	043		75
80			.009			013			040	80
85	.044	.025	.007	002	004	016	043	039	014	85
90	.063	.037	.023	002	012	022			002	90
95	.084	.051	.028	.010	005	021	010	012	013	95
100			.035			011			044	100
105	.092	.063	.036	.026	.021	005	033	021		105
110			.039			.000				110
120	.079	.053	.044	.031	•020	.004	024	039		120
135			.047			.008			.003	135
150									012	150
155			.050			.011				155
160	.080	.061	.053	.040	.027	.013	010	028	018	180
205			.055			.017				205
210									016	210
225			.065			.019			014	225
240	.095	.073	.064	.050	.045	.023	003	014		240
250			.075			.027				250
255	.122	.091	.079	.065	•052	.030	001	000		255
260			.092			.036			•051	260
265	.189	.136	.110	.085	.065	.035	.013	• 00 Z	.028	265
270	.191	.133	-107	.073	.048	.015			.098	270
275	.124	.076	.061	.034	.014	006	043	055	.096	275
280			.047			014			.090	280
285	.055	.027	.023	.007	.001	014	036	045		285
290			.017			013				290
300	.040	.020	.015	.014	-002	014	032	039		300
315			.015			012			037	315
330									036	330
335			.020			013				335

TABLE 1.- Continued OF POOR QUALITY

		ALPHA	• 9.58,	PHI • 67	.5, 800	Y/WING/TAI	LING DEFLE	CTIONS		
THE TA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEC
0	.009	003	009	016	021	019	047	056	052	٥
55			007			024				25
30									035	30
45			-040			~.020			~.025	45
60	.041	.002	-002	010	015	023	043	055		60
70			004			015				70
75	.006	.002	.007	009	007	012	045	056		75
80			009			030			077	60
85	001	011	018	021	023	035	054	045	051	85
90	.002	019	021	034	033	036			039	90
95	.042	.007	017	037	047	053	033	020	051	95
100			.008			046			079	100
105	.071	•052	.023	.002		029	056	038		105
110			.032			015				110
150	.065	.061	.043	.022	.014	001	031	051		120
135			.051			.010			.003	135
150									023	150
155			.057			.018				155
180	.103	.007	.064	.049	-042	.026	.001	021	011	180
205			.071			.034				205
210									007	210
225			.085			•042			004	225
240	.140	.119	.093	.084	.077	.053	.021	.012		240
250			.114			.066				250
255	. 191	.157	.126	.118	.099	.073	.032	.037		255
260			.151			.086			.147	260
265	. 294	-226	.177	.157	.127	.088	.054	.042	.041	265
270	.279	.201	.157	•121	.084	.040			.132	270
275	.153	.091	.062	.030	.001	728	076	277	.144	275
2 B C			.023			049			.076	280
265	.037	.004	012	027	037	052	074	074		285
290			020			052				290
300	.012	008	020	021	032	039	~.056	064		300
315	-		017			035			072	315
330									068	330
335			005			033				335

		ALPHA	- 14.60,	PHI = 67	.5, 8001	//WING/TAL	L/NO DEFLE	CTIONS		
THETA				(CP AT X/L+					THETA
DEG	0.10	0.20	0.30	0.48	0.50	0.60	0.70	0.85	0.95	DEG
0	023	037	044	045	053	048	077	088	099	0
25			032			052				25
30									072	30
45			.023			046			~.052	45
60	.021	017	016	028	035	049	071	078		60
70			021			039				70
75	011	013	009	027	028	036	071	062		75
80			034			052			105	80
85	032	042	049	044	041	046	048	056	089	85
90	047	044	034	043	042	042			074	90
95	017	050	059	060	056	050	057	042	100	95
100			032			080			125	100
105	.042	.029	002	020	025	057	+.076	076		105
110			.017			032				110
120	.085	.057	.044	•022	.010	005	034	053		120
135			.064			.016			.006	135
150									012	150
155			.080			.032				155
180	.128	.106	.095	•073	.058	.046	.019	002	.005	180
205			.110			.061				205
210									.007	210
225			.131			.076			.014	225
240	. 195	.165	.150	.126	.123	.097	.060	.049		240
290			.103			.118				250
255	.272	.231	.206	-176	.168	.133	.088	.084		255
260			.244			.156			.261	260
265	.408	.333	.283	.236	.215	.164	.131	.096	.055	265
270	. 373	.287	.243	.102	.149	.092			.146	270
275	. 192	.121	.092	.046	.019	016	~.068	079	.186	275
280			+025			061			.131	280
285	.029	010	027	049	061	079	109	117		285
290			045			085				290
300	016	045	057	058	080	091	111	111		300
315			058			085			125	315
330									123	330
335			043			070				335

ORIGINAL PAGE 19 OF POOR QUALITY

TARLE 1.- Continued

THETA					CP AT X/L.					THET
066	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
9	061	076	095	104	119	105	131	132	146	0
25			085			112				25
30									139	30
45			008			086			116	45
60	.001	042	049	062	070	085	106	109		60
70			050			068				70
75	027	037	037	058	054	059	090	088		7:
80			059			068			124	80
85	066	066	061	053	048	058	071	078	109	85
90	071	060	042	048	051	054			089	40
95	073	069	057	054	056	057	068	047	120	95
100			066			081			146	100
105	.029	.008	023	038	039	070	080	089		105
110			.007			038				110
120	.088	.059	.045	.029	.016	001	026	042		120
135			.076			.031			.019	135
150									.012	150
155			.100			.055				155
180	.163	.139	.126	.109	.089	.079	.049	.029	.028	180
205			.150			.100				205
210									.032	210
225			.183			.123			.043	225
240	.260	.230	.216	.188	.180	.155	-115	.101		240
250			.267			.188				250
255	. 366	.322	.302	.261	.251	.211	.161	.148		255
260			.357			.247			.357	260
265	.535	. 452	.407	.347	.323	. 260	.250	.171	.134	265
270	.476	. 581	.344	.267	.227	.162			.249	270
275	. 232	.156	.132	.080	.049	.010	043	050	.258	275
280			.036			055			.275	280
285	.027	013	028	051	064	082	114	119		285
290	_		054			096				290
300	034	062	074	073	099	108	128	126		300
315			089			114			158	315
330									162	330
335			087			122				335

		ALPHA	- 24.61.	PHI - 67.	.5, BOO	Y/WING/TAI	L/NO DEFLE	CTIONS		
THETA					CP AT X/L=	ì				THETA
DEG	0 10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	693	107	124	121	137	116	143	143	159	0
25			121			137				25
30									162	30
45			042			136			149	45
60	- • 023	096	101	114	122	133	145	136		60
70			102			100				70
75	- 050	067	060	~.096	086	087	124	124		75
80			072			104			099	80
85	077	069	067	061	063	089	119	116	093	85
90	081	064	048	058	060	063			107	90
95	088	065	058	061	063	065	079	049	143	95
100			076			083			160	100
105	.013	•001	028	041	038	067	077	092		105
110			.009			030				110
120	• G95	.070	.058	.045	.033	.015	009	023		120
135			.098			.055			.046	135
150									.040	150
199			.131			.086				155
180	.199	.177	.163	.153	.130	.119	.087	.073	.055	180
205			.192			.147				205
210									.068	210
225			.231			.179			.078	225
240	• 330	. : 99	.279	.261	.243	.221	.175	•162		240
250			.346			.267				250
255	.467	.421	.397	.362	.337	.301	.247	.224		255
260			.470			.352			.493	260
265	.675	.585	.537	.477	.438	.373	.373	. 259	.196	265
270	.589	. 485	.446	.367	.312	.244			.352	270
275	.278	.197	.171	.123	.083	.046	005	.022	.305	275
280			.047			045			.351	200
285	•028	011	028	046	062	078	114	105	_	285
290			060			096				290
300	043	072	087	080	105	113	136	129		300
315			104			124			164	315
330			· - -						172	330
335			103			133				335

TABLE 1.- Continued ORIGINAL PAGE IS OF POOR QUALITY

THETA				_						
DEG	0.10	0.20	0.30	0.40	P AT X/L=	• • •				THET
064	****	0.20	0.30	0.40	0.70	0.60	0.70	0.85	0.95	DEG
0	.059	.042	.032	•023	.016	.010	020	035	024	0
25			.032			.005				25
30									022	30
45			.073			.008			033	45
60	.094	.050	.042	•026	.019	.005	021	028		60
70			.041			.014				70
75	.093	.065	.057	.033	.029	.018	020	029		75
60			.059			.011			.057	80
85	.156	.117	.086	.062	.047	•020	012	024	.053	85
90	.189	.147	.117	.079	.057	.028			.102	90
95	.164	.121	.069	•065	.044	.021	010	022	.055	95
100			.066			.015			.061	100
105	.101	.082	.055	.040	.037	•012	011	024		105
110			.048			.011				110
150	.073	.057	.044	.030	.021	.009	019	028		120
135			.041			.006			027	135
150									027	150
155			.038			.005				155
180	.064	.049	.036	.026	.014	.004	020	036	023	180
205			.033			.003				205
210									014	210
225			.041			•002			005	225
240	.059	.044	.032	.022	.015	000	025	040		240
250			.035			004				250
255	.062	.043	.032	.023	.010	005	031	028		255
260			•032			003			045	260
265	.075	.047	.032	.019	.008	006	018	025	010	265
270	.080	.050	.035	.019	.007	006			.001	270
275	.072	.046	.039	.023	.009	006	017	025	007	275
280			.048			004			039	280
285	.058	.038	.033	.020	.011	004	031	029		285
290			.030			004				290
300	.060	.039	.031	.028	.013	001	026	036		300
315			.031			.001			006	315
330									016	330
335			.037			.000				335

		ALPHA	53,	PHI - 90.	O. 800Y	/WING/TAI	LIND DEFLE	CTIONS		
THETA					P AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	•062	.043	.034	.023	.017	.012	018	033	014	0
25			.032			.006				25
30									012	30
45			.071			.007			018	45
60	.088	.047	.C38	.022	-016	.002	022	030		60
70			.033			.008				70
75	.073	.053	.045	.026	.021	.011	027	029		75
80			.039			.001			000	80
65	.106	. 375	.049	.035	.023	•002	021	023	.023	85
90	.120	88	.068	.039	.022	.002			.045	90
95	.110	.076	.053	.035	.019	.001	020	022	.024	45
100		•	.045			.001			002	100
105	.079	.064	.042	.079	.028	.001	021	026		105
110			.040			.003				110
120	.067	.048	.040	.026	.017	.003	022	030		120
135			.039			.003			015	135
150									016	150
155			.038			.004				155
180	.066	.048	.037	.026	.015	.005	017	033	014	180
205			.035			.006				205
210									016	210
225			.043			.007			015	229
240	.066	• 050	.037	.027	.020	.007	018	~.030		240
250			.043			.005				250
255	.079	.057	.042	.032	.021	.005	023	024		255
260			.047			.009			006	260
265	.120	.077	.056	.038	.027	.006	015	024	.022	265
270	.134	.087	.066	.042	.028	.006			.048	270
275	.111	.071	.059	.038	.024	. 004	015	026	.036	275
280			.060			.005			.007	280
285	.075	.049	.042	.027	.019	.005	024	026		285
290			.036			.004				290
300	.067	.044	.036	.031	.017	.004	019	029		300
315			.035			.005	• •		014	315
330									016	330
			.040			•007				335
335			.040			•00°				33

ORIGINAL PAGE IS TABLE 1.- Continued OF POOR QUALITY

0.60

.008

0.70

-.022

THETA DEG

0.95

-.024

0.85

-.036

(c) Continued

ALPHA = 4.47, PHI = 90.0, BODY/WING/TAIL/NO DEFLECTIONS

.013

CP AT X/L=

.020

THETA DEG

0.20

.036

0.30

.028

0.10

.057

30									010	30
4.5			.063		***	• 002			005	45
60 70	.081	.036	.027 .020	-014	.009	004	028	039		60 70
75	.055	.037	.030	.012	.010	.003	033	032		75
80	••••		.021		****	009	****		044	80
85	.065	.042	.021	.012	-006	009	021	025	017	Ç 5
90	.064	.044	.032	.010	.001	010			006	90
95	.066	• 042	.023	.010	.000	011	-•055	024	016	95
100	***		.024			010	030	020	046	100
105 110	.058	.047	.025 .026	.012	.016	009 006	030	030		105 110
120	.056	.036	.029	.016	.007	006	029	041		120
135	•070		.030		••••	005			005	135
150									617	150
155			.031			003				155
180	.056	.040	.033	•022	.010	001	023	037	025	160
205			.033			.001				205
210 225			.044			.003			030 031	210 225
240	.066	.049	.041	.030	.023	.006	019	028	031	240
250	****	••••	.051		****	.008				250
255	.091	.066	.054	.042	.029	.011	016	020		255
260			.068			.018	•		.064	260
265	.174	.124	.096	.072	.054	.026	004	024	.045	265
270	.203	.150	.123	.069	•066	.034			.115	270
275	.162	.115	.098	.069	.049	.022	004	027	-084	275
280 285	.091	.060	.080 .053	.037	.026	.014 .010	a.017	024	.082	280 285
290	.041	• • • • •	.044	.031	.020	.007	017	024		290
300	.068	.044	.037	.034	.020	.003	020	027		300
315			.034			.002			029	315
330									030	330
335			.037			001				335
		AI PHA	. 9.48.	PHT • 9n.	- O	//WING/TAII	L/NO DEFLE	T CONS		
		ΔLPHΔ	- 9.48,	PHI • 90		r/wing/tai(L/NO DEFLE	CTEONS		
TRETA	0.10				CP AT X/L+				0.95	THETA DFG
THETA DEG	0.10	∆ LPH ∆ 0.20	• 9.48, 0.30			//WING/TAII 0.60	L/NO DEFLEC	C.65	0.95	THETA DEG
		0.20			CP AT X/L+				0.95 041	D€G O
DEG	0.10 .050		0.30	0.40	CP AT X/L=	0.60	0.70	0.65	041	D€G 0 25
0 0 25 30		0.20	0.30 .020 .016	0.40	CP AT X/L=	0.60 000 010	0.70	0.65	041 034	D€G 0 25 30
0 25 30 45	.050	0.20	0.30 .020 .016	0.40	0.50 .003	0.60 000 010	0.70 031	0.65 046	041	DEG 0 25 30 45
0 25 30 45		0.20	0.30 .020 .016 .056	0.40	CP AT X/L=	0.60 000 010 011 019	0.70	0.65	041 034	D€G 0 25 30 45 60
0 25 30 45 60 70	.050	0.20	0.30 .020 .016 .056 .017	0.40 .008	0.50 .003	0.60 000 010 011 019 015	0.70 031	0.65	041 034	DEG 0 25 30 45 60 70
0 25 30 45 60 70	.050	0.20	0.30 .020 .016 .056 .017 .009	0.40	0.50 .003	0.60 000 010 011 019 015 011	0.70 031	0.65 046	041 034 009	D€G 0 25 30 45 60
0 25 30 45 60 70 75 80	.050	.023	0.30 .020 .016 .056 .017 .009 .019	0.40 .008	0.50 .003	0.60 000 010 011 019 015	0.70 031	0.65	041 034	DEG 0 25 30 45 60 70
0EG 0 25 30 45 60 70 75	.050	0.20	0.30 .020 .016 .056 .017 .009	0.40 .008 001 002	.003 008	0.60000010011019015011021021017	0.70 031 044 047 026	0.65 046 058 036 029	041 034 009 079 057 041	0 25 30 45 60 70 75 80 85
DEG 0 25 30 45 60 70 75 80 85 90	.050 .066 .034	0.20 .032 .023 .020	0.30 .020 .016 .056 .017 .009 .019 .007 .006	001 002	005	0.60000010011019015011021017016018	0.70 031 044 047	0.65 046 058 036	041 034 009 079 057 041 055	DEG 0 25 30 45 60 75 80 85 90
DEG 0 25 30 45 60 70 75 80 85 90	.050 .066 .034 .035 .026	0.20 .032 .023 .020 .018 .017	0.30 .020 .016 .017 .009 .019 .007 .006 .017	001 002 001 003	008 005 005 006 005 006 010	0.60000010011019015011021017016018	0.70 031 044 047 026	0.65 046 058 036 029 031	041 034 009 079 057 041	DEG 0 25 30 45 60 70 75 80 85 90
0EG 025 30 45 60 75 80 80 90 95 100	.050 .066 .034 .035	0.20 .032 .023 .020 .018	0.30 .020 .016 .056 .017 .009 .019 .007 .006 .017	001 002	CP AT X/L- 0.50 .003 008 005 005	0.60000010011019015011021016021023	0.70 031 044 047 026	0.65 046 058 036 029	041 034 009 079 057 041 055	DEG 0 25 30 45 60 70 75 80 85 90 95
0 25 30 45 60 70 75 80 85 90 95 100 105 110	.050 .066 .034 .035 .026 .033	0.20 .032 .023 .020 .018 .017 .017	0.30 .020 .016 .056 .017 .009 .019 .007 .006 .017 .008 .009	001 002 001 002 001 003	008 005 005 006 005 006 000	0.60000010011019015011021016018021023022	0.70 031 044 047 026 028	0.65 046 058 036 029 031	041 034 009 079 057 041 055	DEG 0 25 30 45 60 70 75 80 85 90 95 100
05 0 25 30 45 60 75 85 90 100 105 110	.050 .066 .034 .035 .026	0.20 .032 .023 .020 .018 .017	0.30 .020 .016 .056 .017 .009 .019 .006 .017 .008 .009 .011	001 002 001 003	008 005 005 006 005 006 010	0.60000010011019015011021016018021023022022	0.70 031 044 047 026	0.65 046 058 036 029 031	041 034 009 079 057 041 055 080	DEG 0 25 30 45 60 70 75 85 90 95 100 105 110
0	.050 .066 .034 .035 .026 .033	0.20 .032 .023 .020 .018 .017 .017	0.30 .020 .016 .056 .017 .009 .019 .007 .006 .017 .008 .009	001 002 001 002 001 003	008 005 005 006 005 006 000	0.60000010011019015011021016018021023022	0.70 031 044 047 026 028	0.65 046 058 036 029 031	041 034 009 079 057 041 055	DEG 0 25 30 45 60 70 75 80 85 90 95 100
DEG 0 25 30 45 60 70 75 80 85 90 100 105	.050 .066 .034 .035 .026 .033 .036	0.20 .032 .023 .020 .018 .017 .017	0.30 .020 .016 .056 .017 .009 .019 .006 .017 .008 .009 .011	0.40 .008 001 002 .000 001 003 003	008 005 005 006 000 000	0.60000010011019015011021016018023022021018	0.70 031 044 047 026 028 042	0.65 046 058 036 029 031 038	041 034 009 079 057 041 055 080	DEG 0 25 30 45 60 70 75 85 90 95 100 105 1120 135 150
DEG 0 25 30 45 60 70 75 80 85 90 100 110 120 135 150 160	.050 .066 .034 .035 .026 .033	0.20 .032 .023 .020 .018 .017 .017	0.30 .020 .016 .056 .017 .009 .019 .007 .006 .017 .009 .011 .012 .015 .017	001 002 001 002 001 003	008 005 005 006 005 006 000	0.60000010011019015011021016021023022021018	0.70 031 044 047 026 028	0.65 046 058 036 029 031	041 034 009 079 057 061 055 080	DEG 052530 4560 607580 8590 100105 1101100 135150
0EG 025 30 45 60 70 75 85 90 90 100 105 110 120 135 150 155 180 205	.050 .066 .034 .035 .026 .033 .036	0.20 .032 .023 .020 .018 .017 .017 .030	0.30 .020 .016 .056 .017 .009 .017 .008 .009 .011 .012 .017	0.40 .008 001 002 .000 001 003 003	008 005 005 006 000 000	0.60000010011019015011021016018023022021018	0.70 031 044 047 026 028 042	0.65 046 058 036 029 031 038	041 034 009 079 057 041 055 080	DEG 0 25 30 45 60 75 85 90 95 100 100 120 135 150 150 205
0E6 025 30 45 60 70 75 85 90 90 105 110 120 135 155 180 205 210	.050 .066 .034 .035 .026 .033 .036	0.20 .032 .023 .020 .018 .017 .017 .030	0.30 .020 .016 .056 .017 .009 .017 .008 .009 .011 .012 .015 .017	0.40 .008 001 002 .000 001 003 003	008 005 005 006 000 000	0.60000010011019015011021016028021023022021018014010017	0.70 031 044 047 026 028 042	0.65 046 058 036 029 031 038	041 034 009 079 057 041 055 080	DEG 0 25 30 45 60 70 75 85 90 95 100 105 120 135 150 165 205 210
0E6 025 30 45 60 70 75 80 85 95 100 105 110 120 135 150 150 150 205 225	.050 .066 .034 .035 .026 .033 .036	0.20 .032 .023 .020 .018 .017 .017 .030 .024	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .009 .011 .012 .015 .017 .018	001 002 001 003 003 003	008 005 005 000 000 000	0.60000010011019011021021021023022021018021027018	0.70031044047026028042045	0.65 046 058 036 029 031 038 060	041 034 009 079 057 041 055 080	DEG 05 30 45 60 75 80 85 90 105 110 120 135 150 150 205 215
05 00 25 30 45 60 70 75 85 90 100 105 110 120 135 150 155 180 205 210 225 240	.050 .066 .034 .035 .026 .033 .036	0.20 .032 .023 .020 .018 .017 .017 .030	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .017 .009 .011 .012 .015 .017 .018 .020 .021	0.40 .008 001 002 .000 001 003 003	008 005 005 006 000 000	0.60000010011019015011021016018023022021018014010016010	0.70 031 044 047 026 028 042	0.65 046 058 036 029 031 038	041 034 009 079 057 041 055 080	DEG 0 25 30 45 60 70 75 85 90 95 100 105 120 135 150 165 205 210
DEG 0 25 30 45 60 70 75 80 85 90 105 110 120 125 150 225 240 225	.050 .066 .034 .035 .026 .033 .036 .040	0.20 .032 .023 .020 .018 .017 .017 .030 .024	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .009 .011 .012 .015 .017 .018	001 002 001 003 003 003	008 005 005 000 000 000	0.60000010011019011021021021023022021018021027018	0.70031044047026028042045	0.65 046 058 036 029 031 038 060	041 034 009 079 057 041 055 080	DEG 05 30 45 60 75 85 95 100 130 130 130 130 130 130 130
DEG 025 30 45 60 70 75 85 90 100 120 135 120 135 120 225 240 225 250 250 260	.050 .066 .034 .035 .026 .033 .036 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .017 .009 .011 .012 .015 .017 .018 .020 .021	0.40 .008001002 .000001003003003	008 005 006 005 006 010 000 001	0.60000010011019015011021016018023022021018014010017010	0.70031044047026028042045031021010	0.65 046 058 036 029 031 038 060	041 034 009 079 057 041 055 080 012 042 041 050 052	0 5 6 0 2 5 3 0 4 5 6 0 7 7 0 7 5 8 5 9 0 1 0 5 1 2 0 1 2 5 5 2 1 0 2 2 5 5 2 6 0 2 5 5 2 6 0
DEG 05 30 45 60 70 75 85 90 95 100 110 120 135 150 150 205 225 245 250 255 265	.050 .066 .034 .035 .026 .033 .036 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .009 .011 .012 .015 .017 .018 .020 .021 .035 .053 .065 .092	0.40 .008001002 .000001003003003007	008 005 005 000 010 000 000 001	0.60000010011019015011021016021023022021018014010017016010017	0.70031044047026028042045031	0.65 046 058 036 029 031 038 060	041034009079057041055080012042041050052	DEG 05 30 45 60 75 80 85 90 105 110 120 135 150 150 205 210 225 245 255 265
05 05 30 45 60 70 75 85 90 100 110 120 135 120 225 240 255 270	.050 .066 .034 .035 .026 .033 .036 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .017 .009 .011 .015 .017 .018 .020 .021 .035 .053 .065 .002 .145	0.40 .008001002 .000003003003007	008 005 005 006 005 006 010 000 008	0.60000010011019015011021016018021023021018014010 -	0.70031044047026028042045031021010	0.65 046 058 036 029 031 038 060 047 047	041 034 009 079 057 041 055 080 012 042 061 050 052	DEG 05 30 45 60 75 85 90 105 110 120 135 150 150 255 240 255 260 270
05 30 45 60 70 75 85 90 100 120 135 120 120 225 240 225 265 275	.050 .066 .034 .035 .026 .033 .036 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .009 .011 .012 .015 .017 .018 .020 .021 .035 .053 .065 .092 .145	0.40 .008001002 .000001003003003007	008005006005006010008001008	0.60000010011019015011021018023022021018014010017010 -	0.70031044047026028042045031021010	0.65 046 058 036 029 031 038 060	041034009079057051055080012042041050052	DEG 0 25 30 45 60 77 80 85 90 105 1120 135 150 205 210 225 250 250 250 275
05 30 45 60 70 75 85 90 100 110 120 135 130 130 205 215 240 257 265 270 280	.050 .066 .034 .035 .026 .033 .036 .040 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .006 .017 .008 .009 .011 .015 .017 .018 .020 .021 .035 .035 .035 .095 .095 .091 .146	0.40 .008001002 .000001003003007 .027 .056 .123 .159 .119	008005008005008010 .000008001 .022 .040 .099 .128	0.60000010011019011021011021023021023021023021016016010027010016010017010016010017010017010017010017010017010017010	0.70031044047026028042045031021010 .017	0.65 046 058 036 029 031 038 060 047 032 020 014	041 034 009 079 057 041 055 080 012 042 061 050 052	DEG 05 30 45 60 75 85 90 105 110 120 135 150 150 255 240 255 260 270
05 30 45 60 70 75 85 90 100 110 1120 135 110 120 120 2250 2250 2250 2270 2270 2285	.050 .066 .034 .035 .026 .033 .036 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .007 .008 .017 .008 .017 .018 .020 .017 .018 .020 .021 .035 .035 .092 .145 .092 .146 .104	0.40 .008001002 .000003003003007	008 005 005 006 005 006 010 000 008	0.60000010011019015011021018023022021018014010017010 -	0.70031044047026028042045031021010	0.65 046 058 036 029 031 038 060 047 047	041034009079057051055080012042041050052	DEG 0525 30365 60075 8085 905 1005 1100 1205 1205 1205 1205 1205 12
05 30 45 60 70 75 85 90 100 110 120 135 130 130 205 215 240 257 265 270 280	.050 .066 .034 .035 .026 .033 .036 .040 .040 .048	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .007 .018 .009 .011 .018 .020 .021 .035 .035 .065 .092 .165 .191 .166 .104 .065 .048	0.40 .008001002 .000001003003007 .027 .056 .123 .159 .119	008005008005008010 .000008001 .022 .040 .099 .128	0.60000010011019015011021018021023021018014010010017010 -	0.70031044047026028042045031021010 .017	0.65 046 058 036 029 031 038 060 047 032 020 014	041034009079057041055080012042041050052	DEG 05 30 45 60 75 85 90 105 110 120 130 130 130 130 130 130 130 13
05 30 45 60 75 85 90 100 105 1120 135 1120 125 1205 2250 2250 2250 2275 2285 2285 2290 315	.050 .066 .034 .035 .026 .033 .036 .040 .040 .048 .074 .120 .262 .312 .245	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .007 .018 .020 .017 .018 .020 .021 .035 .053 .065 .093 .065 .191 .146 .104 .065	0.40 .008001002 .000003003003007 .027 .056 .123 .139 .119	008005006005006010008001001002040099128092038	0.60000010011019015011021016018022022023021018014010017016016016017018010017018	0.70031044047026028045031021010 .017 .019	0.65046058036029031038060047032020014013024	041034009079057041055080012042041050052	056 0530 4560 770 8590 105 110 1120 125 1205 2105 2105 2105 2
05 05 30 45 60 70 75 85 95 100 110 120 135 130 135 130 125 240 255 240 255 240 255 240 257 265 270 270 285 285 285 285 285 285 285 285 285 285	.050 .066 .034 .035 .026 .033 .036 .040 .040 .048 .074 .120 .262 .312 .245	0.20 .032 .023 .020 .018 .017 .017 .030 .024 .036	0.30 .020 .016 .056 .017 .009 .019 .007 .018 .009 .011 .018 .020 .021 .035 .035 .065 .092 .165 .191 .166 .104 .065 .048	0.40 .008001002 .000003003003007 .027 .056 .123 .139 .119	008005006005006010008001001002040099128092038	0.60000010011019015011021018021023021018014010010017010 -	0.70031044047026028045031021010 .017 .019	0.65046058036029031038060047032020014013024	041034009079057041055080012042041050052	DEG 05 30 45 60 75 85 90 105 110 120 130 130 130 130 130 130 130 13

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Continued

		ALPHA	. 14.47,	PHI • 90	.O, BDD	Y/WING/TAI	L/NO DEFLE	CTIONS		
THETA					CP AT X/L+					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
C	.039	.018	.012	001	013	014	~.045	059	065	0
25			.004			028				25
30									067	30
45			.041			032			033	45
60	.050	.003	00?	020	030	044	069	085		60
70			013			038				70
75	.013	.000	001	021	024	031	064	047		75
8 C			010			034			114	80
85	.012	.003	007	011	013	027	037	040	096	85
90	.005	.004	.005	010	016	025			067	90
95	.011	.001	006	012	019	028	038	041	089	95
100			008			032			112	100
105	.015	.010	010	021	018	043	056	048		105
110			010			046				110
120	.021	.001	005	022	031	045	069	638		120
135			001			039			044	135
150									071	150
155			.004			032				155
180	.038	.020	.011	003	016	023	046	061	062	180
20>			.015			017				205
210									075	210
225			.034			007			071	225
240	.084	.058	.044	.027	.021	.006	020	034	• •	240
250			.074			•022				250
255	.153	.123	.095	.075	.061	.038	.004	014		255
260			.141			.070			.295	260
265	.356	.284	.226	.187	.163	.118	.060	.015	.127	265
270	. 4 2 4	. 352	.298	.242	.214	.159		••••	. 255	270
275	.332	.267	.227	.180	.158	.113	.060	.015	.176	275
280			.155			.065			.297	280
285	.158	.118	.099	.071	.063	.037	•003	016	•••	285
290			.072			.021		-510		290
300	.086	.055	.046	.034	.021	.006	021	033		300
315			.029			007			071	315
330									076	330
335			.025			019				335
-						•••				

		ALPHA	• 19.47,	PHI = 90	.0, 800	Y/WING/TAI	L/NO OFFLE	CTIONS		
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	.029	.011	003	010	024	024	052	066	083	0
25			015			045				25
30									085	30
45			.021			056			073	45
60	.029	022	033	050	061	077	098	109		60
70			044			070				70
75	011	025	027	045	046	050	001	070		75
80			628			048			146	80
85	004	012	021	024	026	041	054	064	123	85
90	006	009	007	022	028	036			090	90
95	007	014	020	025	032	042	055	067	121	95
100			026			047			139	100
105	0.2	014	035	044	040	063	072	070		105
110			039			080				110
120	005	026	034	052	067	080	100	112		120
135			026			065			081	135
150									087	150
155			016			051				155
180	.025	.011	003	015	028	033	056	009	081	180
205			.008			023				205
210									085	210
225			.038			006			080	225
240	.098	.074	.061	.042	.032	.015	012	026		240
250			.104			.045				250
255	.193	.160	.138	.113	.098	.071	.031	.007		235
260			.203			.120			.422	240
265	,460	• 371	.325	.271	.247	,193	.120	.063	.238	265
270	.552	. 462	.427	.349	.319	.253			.368	270
275	.430	. 352	.327	.262	.240	.185	.121	.064	.203	275
280			•220			•113			.457	280
285	.202	.157	.144	.111	.100	.072	.033	.004		285
290			.106			.045				290
300	.102	.072	.064	.050	.032	.016	013	024		300
315			.033			005			076	315
330									084	330
335			.016			023				335

TABLE 1.- Continued ORIGINAL PAGE IS OF POOR QUALITY

		ALPHA	• 24.49,	PHI = 90	.O, BOD	//WING/TAI	L/NO DEFLE	CTIONS		
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.65	0 95	DEG
0	.025	•005	006	008	024	023	048	063	089	0
25			024			047				25
30									092	30
45			.008			064			086	45
60	.006	050	058	075	082	094	110	114		60
70			065			102				70
75	030	053	054	080	076	075	104	089		75
80			044			075			161	60
85	018	025	736	045	054	074	0.8	084	138	85
90	022	023	- . ⊿21	037	049	066			105	9^
95	026	032	36	041	060	075	084	086	134	95
100			046			071			154	100
105	041	046	072	094	066	084	-, 141	089		105
110			082			112				110
120	034	055	062	778	085	098	1	110		120
135			043			075			091	135
150									094	150
155			026			056				155
160	.017	.003	009	018	029	033	055	066	085	180
205			.039			016				205
210									081	210
225			.044			.008			073	225
240	.116	.093	.078	.064	.049	.034	.006	010		240
250			.138			.678				250
255	.234	.203	.184	.158	.137	.112	.071	.037		255
260	•		.272			.178			.623	260
265	.575	.479	.435	.371	.342	.200	.200	.127	.372	265
270	.694	•600	.566	.479	.440	.304			.517	270
275	.538	.457	.434	.364	.332	.273	.198	.127	.315	275
280	••••		.288			.171	••••		.648	280
285	.251	.204	.190	.158	.140	.114	• 272	.036		285
290			.140	••••	****	.079	• / -			290
300	.128	-094	.086	.075	.052	.037	.008	006		300
315	*****	-077	.044			.009			057	315
330									088	330
335			.022			~.015				335

		ALPHA .	-4.99,	PHI - 0.0	, BODY/	wING/TAIL	PITCH DEFL	ECTION		
THETA				c	P AT X/L+					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DES
0							.013	018	.088	0
25										25
30									.118	30
45									.144	45
60							.007	010		60
70										70
i							010	.011		75
80									114	80
85							.028	.018	.047	85
90									.095	90
95							091	.038	.167	95
100									.702	100
105							046	003		105
110										110
120							038	045		120
135									109	135
150									045	150
										155
155							028	040	007	180
180							****		• • • •	50
205									045	210
210									098	225
225							036	049	-,,,,	24.
240							030	- • • • • •		196
250							050	04€		>6.
255							050	046	.751	2.0
260							093	.014	.160	2+5
265							043	.014		. 0
270									.096	27
275							.028	.015		
280									077	280
285							-	.010		285
290										290
300							• U .	013		300
315									. 150	315
330									.120	330
335										335

TABLE 1.- Continued

(c) Continued

CRIGINAL PAGE IS OF POOR QUALITY

		ALPHA .	.02,	PHI - 0.2	, 3301/	wing/tail/	P TOH DEFL	ECTION .		
THETA DEG	C.10	0.20	G.30	3.4C	P.A. X/L= 0.50	0.50	0.70	G.85	0.95	The TA
0							020	015	.070	q
25 30									.079	25 30
45 60							022	529	.094	4.5 6.0
70 70							025	029		70 75
80 85									063	90
90							019	023	C19 C31	65 90
95 100							017	020	.129 .730	95 100
105 110							017	623		105 110
120 135							019	028	10.	120 135
150 155									03	15C
180							016	032	002	155 180
205 210									~.035	205 210
225 240							017	030	~.095	225 240
250 255							023	024		250 255
260 265									.600	260
270							017	025	016	265 270
275 280							015	025	017 ^70	275 280
285 290							024	026		285 290
300 315							020	029	.098	300 315
330 335									.081	330 335
		ALPHA .	5.00,	PHI - C.O	o, 890Y/	.ING/TAIL	/PiTCH DEF	LECTION		
TMETA DEG	c.1c	4LPH4 •	5.00,		0, 630Y/ P AT T/L= 0.50	Jai¶G/T≜il 0.60	/PITCH DEF 0.70	LECTION 0.85	0.95	THETA DEG
	c.1c			c	P AT X/L=					
DĒG 25	c.ie			c	P AT X/L=		0.70	0.05	.003	0E6 0 25
DEG 25 30 45	6.16			c	P AT X/L=		0.70 03c	0.65		0 25 30 45
DEG 25 30 45 60 70	c.1c			c	P AT X/L=		0.70 03c	0.85	.003	0 25 30 45 60 70
DEG 25 30 45 60 70 75 80	0.10			c	P AT X/L=		0.70 03c 040 055	0.65 040 048	.003	0 6 6 2 5 3 0 4 5 6 0 7 0 7 5 8 0 0
DEG 25 30 45 60 70 75 80 85	c.10			c	P AT X/L=		04C 055 100	0.05 040 048 068	.003 .044 .066	0 E G 25 30 45 60 70 75 80 85
DEG 25 30 45 60 75 75 80 85 90	c.ie			c	P AT X/L=		0.70 03c 04C 055 100	0.05 040 048 068 075	.003 .044 .066	0 E G 25 30 45 60 70 75 80 85 90 95
DEG 25 30 45 60 70 75 80 85 90 95 100	6.16			c	P AT X/L=		04C 055 100	0.05 040 048 068	.003 .044 .066 022 119 083	0 E G 23 30 45 60 70 75 85 90 95
DEG 25 30 45 60 75 80 85 90 95 100 105 112	6.16			c	P AT X/L=		0.70 03c 04C 055 100	0.05 040 048 068 075	022 119 003 .119 .651	0 25 30 45 60 70 75 80 95 90 95 100 105
DEG 25 30 45 60 77 75 80 85 95 100 110 120 135	c.10			c	P AT X/L=		0.70 03c 04C 055 100 .020 005	0.05 040 048 068 075 .018	.003 .044 .066 022 119 083	0 E G 0 23 30 45 60 70 75 80 90 95 100 105 110 120 135
DEG 25 30 45 60 77 75 80 85 95 100 115 115 115 115 115 116	c.16			c	P AT X/L=		0.70 03c 04C 055 100 .020 005	0.05 040 048 068 075 .018	022 022 117 083 119 051	0 E G 2 7 3 3 C 4 5 6 0 7 7 0 7 7 9 0 0 1 0 5 1 1 0 5 1 1 1 0 1 1 2 0 1 1 3 5 1 5 5 1 1 8 0
DEG 25 30 45 60 75 80 85 90 95 100 105 117 120 135 150 155 140 205 216	c.10			c	P AT X/L=		0.70 03c 040 055 100 .020 005	0.85 040 048 068 075 .018 .014	022 119 083 -119 51	0 25 30 45 60 70 75 80 95 100 105 110 120 135 150 150 180 205
DEG 25 30 45 60 75 85 90 95 100 105 110 120 135 150 155 160 225 240	c•16			c	P AT X/L=		0.70 03c 040 055 100 .020 005	0.85 040 048 068 075 .018 .014	022 022 119 003 119 053	0 6 6 0 2 5 3 0 6 0 7 5 6 0 0 7 5 9 0 0 1 0 5 1 1 0 0 1 2 0 1 3 5 1 1 5 0 1 5 5 1 1 8 0 2 0 5 2 1 0 2 2 5 2 4 0 0 0 1 5 5 1 5 0 1 5
DEG 25 30 45 60 77 75 80 85 90 95 100 110 120 135 150 150 205 210 225	c•1c			c	P AT X/L=		0.70 03c 04C 055 100 .020 005 .007	0.85 040 048 068 075 .018 .014 008	022 119 083 -119 51	0 E G 2 7 3 3 C 4 5 6 6 6 7 7 0 7 7 9 9 6 9 9 5 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
DEG 25 30 45 60 75 80 75 80 100 105 110 120 135 150 155 140 225 240 256 255 260	6.16			c	P AT X/L=		0.7003c04C055100 .020005 .007	0.85 040 048 068 075 .018 .014 008	022119083119551	0 25 30 45 60 70 75 80 90 95 100 105 120 135 150 150 205 215 225 240 250 255 260
DEG 25 30 45 60 77 75 80 85 90 95 100 110 120 135 150 150 205 210 225 240 250 255 260 265 270	0.10			c	P AT X/L=		0.7003c04C055100 .020003 .007 .014	0.85 040 048 068 075 .018 .014 008 007	022119003119003119051099000355001090	0 E G 0 23 30 45 60 77 70 75 80 90 105 110 120 135 150 150 205 210 225 240 255 260 285
DEG 25 30 45 60 77 75 90 95 100 110 120 135 150 150 150 205 210 225 240 255 270 275 226	c.16			c	P AT X/L=		0.7003c04C055100 .020007 .014 .009010 .022097	0.85 040 048 068 075 .018 .014 008 007	022 022 119 083 119 551	0 E G 2 7 3 3 C 4 5 6 6 6 7 7 0 7 7 9 7 9 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9
DEG 25 30 45 60 77 75 80 85 90 100 115 125 150 155 176 205 225 240 255 266 275 266 279	c.10			c	P AT X/L=		0.7003c04C055100 .020005 .007 .014 .009010 .022097054	0.85040048068075 .018 .014008007011 .014 .015077063	022 119 083 -119 551 099 000 .035 001 090	0 E G 2 7 3 3 C 4 5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
DEG 25 30 45 60 75 80 75 80 100 110 120 135 150 155 180 256 256 256 276 275 285	0.10			c	P AT X/L=		0.7003c04C055100 .020007 .014 .009010 .022097	0.85 040 048 068 075 .018 .014 008 007	022 119 083 -119 551 099 000 .035 001 090	0 E G 0 23 30 45 60 77 80 90 95 100 105 110 120 1355 180 205 210 225 240 250 265 270 275 285

TABLE 1.- Continued ORIGINAL PAGE IS OF POOR QUALITY

(c) Continued

ALPHA = 10.02, PHI + 0.0. BODY/WING/TAIL/PITCH DEFLECTION

		ALPHA .	10.02,	BHI .		9001/8	TMPALTE	ALLICH DEPE	ECITOR		
THE TA DE G	G.10	0.20	0.30	0.40	CP AT	X/L= .50	0.60	0.70	0.85	0.95	TMETA DEG
0								055	057	056	0 25
30										016	30
45 60								066	075	.035	45 60
70											70
75 80								142	147	157	75 80
85								139	142	171	85
90 95								.035	-065	137 .154	90 95
100										.629	100
105 110								.029	.052		105 110
120								.057	.025		120
135 15û										074	135 150
155								.068	03.6		155 180
180 205								.000	.036	.384	205
210 225										-059 070	210 210
240								.060	.025	010	240
250 255								.026	.053		250 255
500										.515	260
265 270								.034	.059	.130 143	265 270
275								136	145	169	275
280 285								144	143	154	280 285
290											290
30C 315								063	374	-036	300 315
330 335										025	33C 335
THETA			• 15.01,) =]H4	CP AT	X/L-		/PITCH DEF			THETA
956	0.10	0.20	0.30	0.40	C	.50	0.60	0.70	0.85	0.95	930
0 25								340	091	097 108	0 25 30
30 45										097	45
60 70								146	135		60 70
75								153	160		75
80 85								165	153	178 177	60 85
90										149	90
95 100								.065	-129	.209 .623	95 100
105								.078	.105		105 110
110 120								•122	.085		120
135 150										03b .126	125 150
155											155
180 205								-141	.124	.148	180 205
210										.127	21C
225 240								.129	.085	031	725 240
250											250
255 260								•077	.107	.527	255 260
265								.070	.123	.165	265 270
270 275								162	156	159 177	275
280 285									107	180	280
290								m.152			285
300 315								153			285 290
								153 147	134	097	290 300
330 335										097 111	290

ORIGINAL PAGE 13 OF POCR QUALITY

TABLE 1.- Continued

		ALPHA .	\$0.02,	PHI - 0.0	. 8004/	-[#6/7A]L	PETCH DEF	ECTION		
THE TA DEG	0.10	0.20	0.30	0.40	G.50	0.60	0.70	0.85	0.95	THETA DEG
0 25							124	121	128	.0
30 45									144	25 30
60 70							100	156	127	45 60
75 80							165	169		70 75
85							179	161	179 177	80 85
90 95							.116	.213	146 .275	90 45
100 105							.143	.177	.665	100 105
110 120							.206	.163		110 120
135 150									-211	135 150
155 180							-235	.190	.230	155 180
245 210							-		-213	205 210
225 240							-210	•162	.025	225 240
250 255							.144	.102		250
260 265									-567	255 260
270 275							.110	• 506	.247 161	265 270
280 285							176	164	178 183	275 2 60
290 300							166	~.165		2 0 5 290
315							169	157	125	300 315
330 335									145	330 335
		ALPHA :	25,02,	PHI = 0.	o, 8084/	VENGITALL	/PITCH DEF	LECTION		
THETA DEG	0.10	0.20	0.30	0.40	CP AT M/L- G.50	0.60	0.70	0.85	0.95	THETA DEG
0	0.10	0.20	V•30	4.40	4.50	0.00	0.70 145	139	139	0
25 30									144	25 30
45 60							172	160	144	45 60
70 75							173	172		70 75
80 83									17	80
90							186	167	173 135	95 90
95 100							-180	-310	.314 .715	95 100
105 110							•551	• 269		105 110
120 135							.306	• 252	.103	120 135
150 155									.306	150 - 155
180 205							.343	•588	.324	180 205
210 -25									.308	210 225
240 250							.320	.255		240 250
255 260							.224	• 276	.603	255 260
265 270							-194	• 302	.293 157	265 270
275 280							181	171	177 184	275 280
285 290							175	169	7.07	285 290
305 315							176	160	m.143	300
330 335									143 149	315 330
432										335

TABLE 1.- Continued

				(c) Conti	nued	OF	RIGINAL POOR	PAGE	E IS ITY
		AL PH	A + -4.82,	PHI - 0.0.	800*/#[46/74]L/	YAN BEF	LECTIOM		
THE TA DE G	0.10	0.20	0.30	CP AT 3/L		.73	0.85	0.95	THETA DEG
0					•	.014	013	.036	0 25
25 30								019	30
60					•	.006	009	097	45 60
70 75						009	-010		70 75
90 95						.024	-017	.707	60 65
90 95						. 0 e z	.084	-407 -370	90 95
100 105					-,	041	.368	.348	100 105
110 110						.039	.067		110 120
135 150								068	135 150
155 180						033	017	055	155 190
205 210								-057	205 210
225 240						.036	050	.399	225 240
250 255						.047	960		250 255
260 265						.093	073	143 105	260 265
270 275						.027	.013	080	270 275
280 285						C12	.009	137	280 285
290 300						.006	013		290 300
315 330 335					•		••••	•16Z •130	315 330 335
		AL PH	:A = .00,		BODY/WING/TAIL	/YAW DEF	LECTION		
THE TA DF G	2.10	0.20	0.30	CP AT X/		0.70	0.85	0.95	THETA
0						.016	031	.015	0
25 30								055	25 30
45 60					-	•022	.004	105	45 60
70 75					-,	.025	.101		70 75
85					-	-019	.073	.707 .411	80 85
90 95					-	.017	.040	+89 .427	90 95
100 105						.017	-046	.737	100 105
110 120						.019	011		110 120
135 150								108 059	135 190
155 180					-	.015	632	.017	155 180
205								.097	205 210
210 225					-	.019	030	.120	225 240
240 250							024		250 255
255 260						.024	025	144 101	260 265
265 270						-^18		074	270 275
275 280						.016	025	135	280
285 290						.025	026		285 290
300 315					-	.021	030	.171	306 315
330 335								.094	330 335

TABLE 1.- Continued



DEG										
	G.10	0.20	0.30	0.40	P AT 1/L=	0.60	0.70	0.85	0.95	THE T
0										
25							033	017	010	0 25
30									056	30
45									077	45
60							039	.027	••••	60
70							****			70
75							019	.021		75
60							****		.209	80
85							015	.023	-206	85
90									.253	90
95							•055	- 020	.107	95
100									.694	100
105							005	-015		105
110										110
120							.007	007		120
135									103	135
150									020	150
155										155
180							.014	007	.045	160
205										205
510									.142	210
225									.164	225
240							.006	012		240
250										250
255							011	.013		255
260									143	260
265							.020	.014	113	565
270									077	270
275							096	077	102	275
260									136	200
285							054	063		285
290										290
300							039	048		300
315									.111	315
330 335									.066	330 335

		ALP	PHA - 10.01,	PHI •	0.0, B	19H1W\TGO	TAIL/YAM D	EFLECTION		
THETA				(P AT E/L-					THETA
DEG	C.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							052	049	027	0
25										25
30									057	30
45									045	45
60							065	049		60
70										70
75							105	028		75
80									.021	60
65							099	031	.111	85
90									.180	96
95							.036	.066	.179	95
100									.655	100
105							.028	•053		105
110										110
120							.057	.025		120
135									081	135
150									.044	150
155										155
180							.069	.038	.082	183
205										205
210									-211	210
225									.239	225
240							.059	.024		240
250										250
255							.024	.052		255
260									145	260
265							.033	.058	133	265
270									127	270
275							137	148	165	275
280									169	280
285							146	146		285
290										540
300							064	075		300
315									.084	315
330									.018	330
335										335

TABLE 1.- Continued (c) Continued ORIGINAL PAGE IS OF POOR QUALITY

		ALP	HA = 15.02	, PHI =	0.0, 5	ODY/WING/	TAIL/YAH	DEFLECTION		
THE TA DFG	C.10	0.20	0.30	0.40	CP AT X/L- 0.50	0.60	0.70	0.85	0.95	THETA DEG
0							006	093	081	0
25 30									093	25 30
45 60							144	080	117	45
70										60 70
75 80							127	085	027	75 80
85 90							108	080	.047 .098	85 90
95 100							-068	.130	.217	95
105							.079	.107	.637	100 105
110 120							•123	.085		110 120
135 150									049	135 150
155 180								• • •		155
205							.143	.104	.153	180 205
210 225									.314 .344	210 225
240 250							.128	.083		240
255							.076	.106		250 255
260 265							-067	.122	136 125	260 265
270 275							163	156	132 175	270 275
280 285									177	280
290							155	150		285 290
300 315							148	135	099	300 315
330 335									104	330 335
		ALP	HA = 20.31			ODY/WING/	TAEL/YAW	DEFLECTION		
THETA DEG	0.16	0.20	0.30	0.40	0.50	0.60	0,70	0.85	0.95	THETA DEG
0							123	122	124	0
25 30									139	25 30
45 60							161	092	153	45 60
70 75							147	101		70 75
80									017	80
85 90							123	097	006 -006	e5 90
95 100							.119	.214	.277 .676	95 100
105 110							.145	.179		105 110
120							.206	.163		120
135 150									.202	135 150
155 180							.236	.189	.279	155 180
205 210									.455	205 210
225 240									.479	225
250							.215	.161		240 250
255 260							•142	.179	122	255 260
265 270							•115	. 205	109 129	265 270
275 280							177	167	174 179	275 280
285							167	165	****	285
290 300							170	159		300 300
315 330									178 139	315 330
335										335

TABLE 1.- Continued

ORIGINAL PAGE 19 OF POOR QUALITY

		AL F	PHA = 25.03,	PHI =	0.0,	400Y/WING/	TATL/YAM D	EFLECTION		
THETA				С	P AT 1/L					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.65	0.95	DEG
0							146	134	149	0
25										25
30									~.162	30
45									~.168	45
60							159	119		60
70										70
75							147	126		75
9 G									078	80
65							131	170	~.078	85
90									066	90
95							.184	•312	.321	95
10C									.730	100
105							.222	•272		105
110										110
120							.306	.254		120
135									.075	135
150									.298	150
155										155
180							. 345	.289	.480	180
205										205
210									.614	210
225									.628	225
240							.319	. 254		240
250										250
255							•555	• 272		255
560									101	260
265							.182	. 299	090	265
270									135	270
275							183	176	178	275
280									180	280
285							176	172		265
5 9 0										290
300							177	165		300
315									154	315
330									162	330
335										335

			-4.88,	PHI - 0.0,	300.71		ROLL DEFL			
HETA				CF	AT X/L+					THET
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							.011	012	.038	c
25										25
30									016	3
45									098	45
60							.005	010		6
70										7
75							010	.010		7
80									.637	
85							.027	.017	.151	8
90									082	9
95							094	071	115	9
00									005	10
05							043	062		10
10										11
20							039	049		12
35									.078	13
50									.054	15
55										15
80							033	042	020	18
05										20
10									069	21
25									109	22
40							036	049		24
50										25
255							049	049		25
260									.760	26
265							093	.015	.159	26
270									-097	27
77							.029	.014	.040	27
									075	28
							012	.010		20
										29
							.007	013		30
									.160	31
									.136	33
										33

TABLE 1.- Continued ORIGINAL PAGE 19 OF POOR QUALITY

		ALPHA =	.01.	PHI = 0.	O, 800Y/	ding/tall	ROLL DEFL	ECT10N		
THE TA DEG	0.10	0.20	0.30	3.40	CP AT X/L- 0.50	0.60	0.70	0.85	0.95	THETA
0 25							020	031	•021	0
30									046	30
45 60							023	030	109	45 60
70 75							026	030		70 75
80									.736	80
85 90							020	024	.167 018	85 90
95 100							018	020	010 075	95 100
105							015	023	••.5	105
110 120							019	028		110
135 150									.108 .083	135 150
155 180							015	032	.003	155 180
205							015	032		205
210 225									059 098	210 225
240 250							C17	~.030		240 250
255							023	024		255
260 265							018	025	.648 .115	260 265
270 275							016	025	014 008	270 275
280 285									068	280
290							025	026		205 290
300 315							021	030	.113	300 315
330 335									.091	330 335
		ALPHA .	5.02,	PHI = 0.0), BOD4/	WING/TAIL/	POLL DEFLE	CTION		
THE TA DEG	0.10	0.20	0.30	0.40	P AT X/L=	0.60	0.70	0.85	0.95	THETA Deg
0	****	****	****	21.12	••••	******	035	041	012	0
25 30									056	25 30
45 60							041	049	117	45 60
70										70
75 80							056	038	.816	75 60
65 90							100	•050	.209 .099	85 90
95 100							.019	-019	.043 074	95 100
105							003	.014	014	105
110 120							.006	008		110 120
135 150									.157 .133	135 150
15) 180							.014	007	.032	155 180
205 210									031	205 210
225									080	225
240 250							.008	011		240 250
2 5 5 260							010	.014	.598	255 260
265 270							021	.015	.113 080	265 270
275 280							096	078	115	275
285							055	064	008	280 285
290 300							039	050		290 300
315 330									.084 .059	315 330
335									-077	335

TABLE 1.- Continued

ontinued ORIGINAL PASSION OF POOR QUALITY

		ALPHA =	13.61,	PHI = 0.0	, B00Y/	HING/TALL	POLL -cfL	ECTION		
THETA				CI	P AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0-50	0.53	0.70	0.65	0.95	0 € G
0							054	~.060	043	0
25										25
30									050	30
45									122	45
60							065	076		60
70										70
75							148	143		75
80									.286	80
85							143	135	.044	8.5
90									.071	90
95							.032	.064	021	95
100									091	100
105							.028	.051		105
110										110
120							.055	.024		120
135									.234	135
150									.201	150
155										155
190							.069	.037	.076	180
205										205
210									.012	210
225									049	225
240							.059	.024		240
250								_		250
255							.026	.053		255
260									.566	260
265							.035	.059	.146	265
270									157	270
275							138	153	174	275
280									168	280
285							150	153		285
290										290
303							064	075		300
315								. • . •	.041	315
330									013	330
335										335

		ALPHA =	15.01,	PHI - 0.0). BOCY	WING/TAIL	/ROLL DEFL	ECTION		
THETA					P AT X/L.					THETA
DEG	0.10	0.20	0.30	0.40	C.50	0.60	0.70	0.85	0.95	DEG
٥							089	095	095	С
25										25
30									098	30
45									107	45
60							147	136		60
70										70
75							155	129		75
80									059	80
85							167	095	000	85
90									.009	90
95							.063	-129	083	95
100									112	100
105							.076	.105		105
110										110
120							.121	.084		120
135									.341	135
150									.307	150
155										155
100							.141	.103	.142	180
205 210										205
									.073	210
225 240									006	225
250							-128	.084		240
255										250
260							.076	.107		255
265									.590	260
270							-070	.123	.200	265
275									162	270
280							164	156	178	275
285									183	280
290							156	159		285
300										290
315							150	137		300
330									099	315
335									113	330
333										335

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 1.- Concluded

(c) Concluded

			20.03,	PHI - 0.0			ROLL DEFL	CITON		
THETA DEG	0.10	0.20	0.30	0.40	P AT X/L= 0.50	0.60	0.70	0.85	0.95	THET A
0 25							126	127	131	0
30 45 60 70							168	140	132 140	25 30 45 60 70
75 80							167	-,;33	045	75 80
95 90							101	114	.020	85 9C
95 100							.113	.210	064 109	95 100
105 110							.142	.173		105 110
120 135 150 155							.205	-161	.474 .446	120 135 150 155
180 205							.235	.159	•265	180
210 225 240 250							-217	.162	.148 .050	205 210 225 240
255 260							.145	.163		250 255
265 270							.121	.207	.661 .276	260 265
275 280							178	165	159 177	270 275
285							168	166	182	280 285
290 300 315 330							171	161	124 147	290 300 315 330
THFTA		ALPHA =	25.02,	PHI = 0.0		WING/TAIL	/ROLL DEFLI	ECTION		TUETA
THETA DEG	0.10	ALPHA =	25.02,		, 800Y/ P AT X/L= 0-50	WING/TAIL	/ROLL DEFLE 0.70	0 • 8 5	0.95	THET A DEG
D E G O	0.10			c	P AT X/L=				0.95	DEG O
0 E G 2 5 3 0	0.10			c	P AT X/L=		0.70	0.85	147 154	DEG 0 25 30
DEG 0 25	0.10			c	P AT X/L=		0.70	0.85	147	DEG 0 25 30 45 60
0 25 30 45 60 70 75	0.10			c	P AT X/L=		0.70 148	0.85 142	147 154 156	DEG 0 25 30 45 60 70 75
DEG 0 25 30 45 60 70	0.10			c	P AT X/L=		0.70 148	0.85	147 154 156 053 038	DEG 0 25 30 45 60 70 75 60 85
DEG 0 25 30 45 60 70 75 80 85 90	0.10			c	P AT X/L=		0.70 148 173 175	0.85 142 148 154	147 154 156 053 038 054 069	DEG 0 25 30 45 60 70 75 60 85 90
0 25 30 45 60 70 75 80 85 90 95 100 105	0.10			c	P AT X/L=		0.70 148 173 175 186	0.85 142 148 154 139	147 154 156 053 038	DEG 0 25 30 45 60 70 75 60 85 90 95
0 E G	0.10			c	P AT X/L=		0.70 148 173 175 186	0.85 142 148 154 139	147 154 156 053 038 054 069 098	DEG 0 25 30 45 60 70 75 60 85 90 95 100 105 110
0 EG 0 25 30 45 60 70 70 70 80 85 90 95 100 105 1:0 120 125 150 155	0.10			c	P AT X/L=		0.70146173175186 .178 .218	0.85 142 148 154 139 .309 .266	147 154 156 053 038 054 069 098	DEG 0 25 30 45 60 70 75 60 95 100 105 110 120 135
0E6 0 25 30 45 60 70 70 85 90 95 100 105 1120 135	0.10			c	P AT X/L=		0.70 148 173 175 186 .178	0.85 142 148 154 139 .309	147 154 156 053 038 054 069 098	DEG 0 25 30 45 60 70 75 60 85 90 95 100 105 110 120 135 180 205
0EG 0 25 30 45 60 77 70 80 85 90 95 100 1120 1155 1150 1205 210 225 240	0.10			c	P AT X/L=		0.70 148 173 175 186 .178 .218 .304	0.85 142 148 154 139 .309 .266 .252	147 154 156 053 038 054 069 098	DEG 0 25 30 45 60 70 75 60 85 90 105 110 120 135 150 158 205 210 225
0 EG 0 25 30 45 60 70 75 80 85 90 95 100 105 120 125 150 155 180 205 210 225 240 225	0.10			c	P AT X/L=		0.70146173175186 .178 .218 .304	0.85 142 148 154 139 .309 .266 .252	147154156053038054069098	DEG 0 25 30 45 60 70 75 60 85 90 91 100 120 135 150 150 205 210 225 240 250
0 E G 0 25 30 45 60 70 70 70 80 95 90 95 100 105 110 120 135 150 155 180 205 210 225 225 2250 250	0.10			c	P AT X/L=		0.70146173175186 .178 .218 .304 .344	0.85142148154139 .309 .266 .252 .289	147154156053038054069098625009	DEG 0 25 30 45 60 70 75 60 95 90 105 110 120 135 150 155 180 205 210 225 250 250
0EG 0 25 30 45 60 77 70 75 80 85 90 95 100 1120 1150 1205 120 1255 1200 2255 2200 2250 225	0.10			c	P AT X/L=		0.70146173175186 .178 .218 .304 .344 .319 .224	0.85142148154139 .309 .266 .252 .289 .255 .278 .303	147154156053038054069098625608622122	DEG 0 25 30 45 60 70 75 60 105 110 120 135 150 155 210 225 240 250 265 270
0EG 0 25 30 45 60 70 75 80 85 90 95 100 105 1150 1155 150 125 210 225 240 255 225 2260 277 2275 280	0.10			c	P AT X/L=		0.70146173175186 .178 .218 .304 .344 .319 .224 .187184	0.85142148154139 .309 .266 .252 .289 .255 .278 .303174	14715415605303805406909862560862242122	DEG 0 25 30 45 60 75 60 75 100 110 120 135 150 155 180 205 210 255 240 255 260 275 260 275 286
0EG 0 25 30 45 60 70 70 70 80 85 90 95 100 110 120 120 155 150 205 210 225 240 255 270 265 270 285 280	0.10			c	P AT X/L=		0.70148173175186 .178 .218 .304 .344 .319 .224 .187184178	0.85142148154139 .309 .266 .252 .289255 .278 .303174171	147154156053038054069098625608462242122700326153179	DEG 0 25 30 45 60 75 60 85 90 105 110 120 135 150 155 210 225 240 255 240 255 270 275 280 285
0EG 0 25 30 45 60 77 70 75 80 85 90 95 100 1120 1150 1150 120 125 240 225 240 250 255 270 275 280	0.10			c	P AT X/L=		0.70146173175186 .178 .218 .304 .344 .319 .224 .187184	0.85142148154139 .309 .266 .252 .289 .255 .278 .303174	147154156053038054069098625608462242122700326153179	DEG 0 25 30 45 60 75 60 75 60 95 100 105 115 1150 125 225 240 250 255 270 275 280

ORIGINAL PACE 13 OF POOR QUALITY

TABLE 2.- PRESSUPE COEFFICIENTS FOR BLUNT-NOSE MODEL

(a) Body-alone configuration

			ALPHA :	-4.90,	PHI = 0.0), BODY	ALDNE			
THETA					CP AT X/L	•				THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0 25	•07P	.074	.063 .064	.053	•048	.047 .039	.030	•045	.049 .014	0 25
45 60	.090	.079	•064 •066	.058	•047	.038 .036	.021	034		45 60
70			.071			.032			062	70
75 60	.096	.087	•076 •074	.060	.045	.027 .018	011	112	062 047	75
85	• 085	.076	-066	.047	•026	011	079	095	067	80 85
96 95	.071 .053	.051 .013	.030 019	.005 048	029 071	068 097	101	- 110	069	90
160	••••	1013	046	040		063	101	110	066 080	95 100
105 110	.011	034	051 044	050	047	045	056	065	075	105
120	021	034	026	025	025	035 026	033	041	076	110 120
135 155			015			021				135
180	006	002	009 006	010	013	018	007	.001	013 .009	155 180
205 225			007			017		•	013	205
225 240	021	031	013 024	024	023	020 025	032	041		225 240
250			038			033		****	069	250
255 260	•013	033	049	047	045	043 062	054	068	081 077	255
265	.050	.016	019	048	072	088	102	105	070	260 265
270 275	.066 .080	.047 .071	.026 .057	.001 .045	030 .020	075 011	085	- 004	061	270
280			.070	****		.017	007	094	063 054	275 280
285 290	•093	.085	.070 .069	.061	.044	.028	014	108	062	285
300	.090	.081	.066	.058	.047	.032 .037	•018	032	061	290 300
315 335			.064			.040				315
337			.064			.040			.007	335
			AL PHA	.02,	PHI = 0.(), 80 0 Y	AL ONE			
THETA			AL PHA	02,	PHI = 0.(AL ONE			THETA
THETA DEG	0.10	0.20	AL PHA 1	0.40	PHI = 0.0 CP AT X/L- 0.50		AL ONE 0.70	0.85	0.95	THETA DEG
DEG	0.10 .027	0.20 .025	0.30		CP AT X/L	0.60		0.85	.009	0 E G
0 E G C 2 5			0.30 .018 .017	0.40	CP AT X/L-	.0.60 .010 .001	0.70			0 E G 0 2 5
0EG C 25 45 60			0.30 .018 .017 .015	0.40	CP AT X/L-	.010 .010 .001 .000	0.70		.009 015	0 25 45 60
DEG C 25 45 60 70	.027	.025	0.30 .018 .017 .015 .014	0.40 .012	CP AT X/L-0.50 .009	.010 .010 .001 .000 002	0.70 002 011	.013	.009 015 035	0 E G 2 5 4 5 6 0 7 0
0EG C 25 45 60 70 75 80	.027 .036 .059	.025 .021 .037	0.30 .018 .017 .015 .014 .017	0.40 .012 .010	CP AT X/L-0.50 .009 .004	0.60 .010 .001 .000 002 005 608	0.70 002 011 031	.013 048 078	.009 015 035 034 029	0 EG 0 25 45 60 70 75
0EG C 25 45 60 70 75 80 85	.027 .036 .059 .074	.025 .021 .037	0.30 .018 .017 .015 .014 .017 .024	0.40 .012 .010 .016	CP AT X/L-0.50 .009 .004 .002	0.60 .010 .001 .000 002 005 008 008	0.70 002 011	.013	.009 015 035 034 029 018	0 EG 0 25 45 60 70 75 80 85
0EG C 25 45 60 70 75 80 85 90	.027 .036 .059	.025 .021 .037	0.30 .018 .017 .015 .014 .017 .024 .031 .046	0.40 .012 .010	CP AT X/L-0.50 .009 .004	0.60 .010 .001 .000 002 005 008 011 007	0.70 002 011 031	.013 048 078	.009 015 035 034 029 018 007	0 EG 0 25 45 60 70 75 80 85 90
0EG C 25 45 60 70 75 80 85	.027 .036 .059 .074 .076	.025 .021 .037 .058 .065	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054	0.40 .012 .010 .016 .027 .036	.009 .009 .004 .002 .011 .018	0.60 .010 .001 .000 002 005 008 008	0.70 002 011 031 053	048 078 049 050	015 035 034 029 016 007 031 037	0 EG 0 25 45 60 70 75 80 85 90
0EG C 25 45 60 70 75 80 85 90 95 100	.027 .036 .059 .074 .076 .072	.025 .021 .037 .059 .057	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .054 .031	0.40 .012 .010 .016 .027 .036 .027	.009 .009 .004 .002 .011 .018 .012	0.60 .010 .001 .000 002 005 008 011 007 007 007	0.70 002 011 031 053 050	.013046076069050078	.009 015 035 034 029 018 007	0 EG 0 25 45 60 70 75 80 85 90 35 100 105
0EG C 25 45 60 70 75 80 85 90 100 105 110	.027 .036 .059 .074 .076	.025 .021 .037 .058 .065	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021	0.40 .012 .010 .016 .027 .036	.009 .009 .004 .002 .011 .018	. 0.60 .010 .001 .000 002 005 008 011 007 007 007 005 002	0.70 002 011 031 053 050	048 078 049 050	015 035 034 029 016 007 031 037	0 E G 0 25 45 60 70 75 80 85 90 100 105 110
0EG C 25 45 60 70 75 80 95 100 105 110 120 135	.027 .036 .059 .074 .076 .072 .054	.025 .021 .037 .058 .065 .057 .034	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .015	0.40 .012 .010 .016 .027 .036 .027 .012	.009 .009 .004 .002 .011 .018 .012	0.60 .010 .001 .000 002 005 008 011 007 007 007	0.70002011031053050029010	.013046076049050078045	.009015035034029018007031037039044	0 EG 0 25 45 60 75 85 90 25 100 120 120 135
0EG C 25 45 60 70 75 80 85 90 100 105 110 120 135 155 180	.027 .036 .059 .074 .076 .072	.025 .021 .037 .059 .057	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .015 .017	0.40 .012 .010 .016 .027 .036 .027	.009 .009 .004 .002 .011 .018 .012	. 0.60 .010 .001 .000 002 005 008 011 007 007 007 005 002 .002	0.70 002 011 031 053 050	.013046076069050078	.009015035034029018007031037039044	0 EG 0 25 45 60 70 75 80 85 90 100 105 110 120 135 180
0EG C 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225	.027 .036 .059 .074 .076 .072 .054 .032	.025 .021 .037 .058 .065 .057 .034 .019	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .015 .017 .018 .019	0.40 .012 .010 .016 .027 .036 .027 .012 .011	.009 .009 .004 .002 .011 .018 .012 .003	0.60 .010 .001 .000 002 005 008 008 011 007 007 007 007 005 002	0.70002011031053050029010	.013048076049050078045	.009015035034029018007031037039044	0 EG 0 25 45 60 70 75 85 90 90 105 110 120 135 185 185 205 225
0EG C 25 45 60 70 75 80 85 90 100 105 110 120 135 150 180 205 225	.027 .036 .059 .074 .076 .072 .054	.025 .021 .037 .058 .065 .057 .034	0.30 .018 .017 .015 .014 .017 .024 .031 .044 .031 .021 .015 .015 .017 .018 .019 .018	0.40 .012 .010 .016 .027 .036 .027 .012	.009 .009 .004 .002 .011 .018 .012	. 0.60 .010 .001 .000 002 005 008 011 007 007 007 005 005 .005 .006	0.70002011031053050029010	.013046076049050078045	.009015035034029018007031037039044018 .012018	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 180 205 240
0EG C 25 45 60 75 80 85 90 95 105 110 120 135 155 180 205 225 240 255	.027 .036 .059 .074 .076 .072 .054 .032	.025 .021 .037 .058 .065 .057 .034 .019	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .017 .018 .019 .018 .018	0.40 .012 .010 .016 .027 .036 .027 .012 .011	.009 .009 .004 .002 .011 .018 .012 .003	0.60 .010 .001 .000 002 008 008 011 007 007 007 005 002 .002 .005 .006 .006	0.70002011031053050029010	.013048076049050078045	.009015035034029018007031037039044018 .012018	0 EG 0 25 45 60 70 75 85 90 105 110 120 135 185 205 225 240 255
0EG C 25 45 60 75 80 85 90 95 100 105 110 120 135 150 180 205 225 240	.027 .036 .059 .074 .076 .072 .054 .032 .027	.025 .021 .037 .058 .065 .057 .034 .019	0.30 .018 .017 .015 .014 .017 .024 .031 .044 .031 .021 .015 .015 .017 .018 .019 .018	0.40 .012 .010 .016 .027 .036 .027 .012 .011	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005	0.60 .010 .001 .000 002 008 008 001 007 007 005 005 005 005 005 005 007 007 005 005 005 006 007 007 005 005 005 007 007 005 005 005 005 007 007 007 007 007 005 005 005 005 005 007	0.70002011031053050029010 .011	.013046076049050078045 .013	.009015035034029018007031037039044018018	0 EG 0 25 45 460 70 75 80 85 90 105 110 120 135 180 205 240 250 260
0EG C 25 45 60 75 80 85 90 95 100 125 110 125 120 255 240 250 255 260 265 270	.027 .036 .059 .074 .076 .072 .054 .032 .027 .032 .054 .069 .072	.025 .021 .037 .059 .005 .057 .034 .019 .022 .021 .034 .056 .056	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .015 .017 .018 .019 .018 .019 .018	0.40 .012 .010 .01C .027 .036 .027 .012 .011 .013	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005 .010 .006 .003	0.60 .010 .001 .000 002 008 008 011 007 007 007 005 002 .002 .005 .006 .006 .005 .006 .006 .006 .007	0.70002011031053050029010 .011010031054	.01304P078049050078045 .013047067	.009015035034029018007031037039044018 .012018	0 EG 0 25 45 60 70 75 85 90 105 110 120 135 185 205 225 240 255
0EG C 25 45 60 75 80 85 90 95 100 105 110 120 135 150 180 205 225 240 250 255 260	.027 .036 .059 .074 .076 .072 .054 .032 .027 .032	.025 .021 .037 .058 .065 .057 .034 .019 .022 .021 .034	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .015 .015 .017 .018 .019 .018 .010 .013	0.40 .012 .010 .016 .027 .036 .027 .012 .011	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005 .010 .006 .003	0.60 .010 .001 .000 002 008 008 007 007 005 005 005 005 005 005 005 007 007 007 007 007 007 007 005 008 008 008 008 008 008 009	0.70002011031053050029010 .011010031	.013046076069050078045 .013047	015035034029018007031037039044018012018	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 180 205 240 250 260 265
0EG C 25 45 60 75 80 85 90 95 100 120 135 150 180 255 240 250 255 260 275 260 285	.027 .036 .059 .074 .076 .072 .054 .032 .027 .032 .054 .069 .072	.025 .021 .037 .059 .005 .057 .034 .019 .022 .021 .034 .056 .056	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .044 .031 .021 .015 .015 .017 .018 .019 .019 .019 .019 .019 .019 .019	0.40 .012 .010 .01C .027 .036 .027 .012 .011 .013	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005 .010 .006 .003	0.60 .010 .001 .000 002 005 008 011 007 007 005 002 .002 .003 .006 .006 .005 .001 005 008 008 001 007 007 007 007 007	0.70002011031053050029010 .011010031054	.01304P078049050078045 .013047067	.009015035034029018007031037039044018012018055045045008008018	0 EG 0 25 45 60 70 75 85 96 105 110 120 135 150 205 245 245 245 265 27
0EG C 25 45 60 77 75 80 85 90 95 100 105 110 120 135 150 205 225 240 255 260 275 280	.027 .036 .059 .074 .076 .072 .054 .032 .027 .032 .054 .069 .072 .071	.025 .021 .037 .058 .065 .057 .034 .019 .022 .021 .034 .056 .062	0.30 .018 .017 .017 .015 .014 .017 .024 .031 .046 .044 .031 .015 .015 .017 .018 .019 .018 .010 .013 .015 .015 .017 .018 .010 .013 .015	0.40 .012 .010 .016 .027 .036 .027 .012 .011 .013	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005 .010 .006 .003 .009 .018 .010	0.60 .010 .001 .000 002 008 008 007 007 005 005 005 005 005 005 005 006 .005 006 .005 008 008 008 008 008 008 008 009 -	0.70002011031053050029010 .011010031054	.013046078049050078045045047076069	.009015035034029018037039044018055045042028008008	0 EG 0 25 45 60 70 75 80 85 90 105 1120 135 155 180 205 225 240 250 265 27
0EG C 25 45 60 70 75 80 85 90 105 110 120 135 150 205 240 250 250 265 277 280 285	.027 .036 .059 .074 .076 .072 .054 .032 .027 .032 .054 .069 .072 .071	.025 .021 .037 .058 .065 .057 .034 .019 .022 .021 .034 .056 .062 .060	0.30 .018 .017 .015 .014 .017 .024 .031 .046 .054 .041 .017 .018 .019	0.40 .012 .010 .016 .027 .036 .027 .012 .011 .013	CP AT X/L- 0.50 .009 .004 .002 .011 .018 .012 .003 .005 .010 .006 .003 .009 .016 .010	. 0.60 .010 .001 .000 002 008 008 007 007 007 005 002 .005 .006 .005 .006 .006 008 001 007 008 008	0.70002011031053050029010 .011010031054054032	.013048078049050078045 .013047076049050	.009015035034029018007031037039044018012018055045045008008018	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 180 205 240 255 240 255 260 265 27 285 290

TABLE 2.- Continued

(a) Continued

ORIGINAL PAGE 18 OF POOR QUALITY

			ALPHA •	5.01.	PHI = C.0	, BODY	ALONF			
THETA					CP AT X/L=					THETA
OEG	0.16	0.20	0.30	0.40	0.50	0.60	(.70	0.85	0.95	DEG
0	009	005	012	017	018	012	- •021	.061	.006	0
25			015			023			012	25
4.5			019			025				45
60 70	023	035	033 044	030	031	031 041	033	041	036	60
75	.009	034	049	053	052	051	056	069	075 083	70 75
80	•••	••••	647		****	067	••••	- • • • • •	071	éó
85	.047	.009	019	049	073	092	111	112	073	85
90	.064	.044	.026	.001	028	067			071	90
95 100	.077	.068	.063	.043	•024	010	078	097	062	95
105	.087	.075	.072 .071	.060	.045	.017 .028	013	113	056 063	100 105
110		•••	.068	****	•••	.034	****	*****	067	110
120	.079	.066	.065	.056	.046	.038	.018	032	-	120
135			.064			.040				135
155 180	.068	•059	.063 .063	.055	.048	.041	.041	.049	•013 •056	155
205	• • • •	•034	.061	.032	•040	.041	.041	.044	.014	100 205
225			.061			.039				225
240	.081	.065	.063	.056	.045	.037	.016	035		240
250	001		.066			.032			066	250
255 260	.084	.073	.066	.058	•042	.026 .014	014	108	066 057	255
265	.075	.061	.053	.041	.019	011	085	097	069	260 265
270	.063	.040	.021	CO2	031	075		••••	065	270
275	.048	.014	018	048	072	083	105	106	073	275
280		0.3.3	043	0.53	0.0	062		• • •	081	280
285 290	.613	032	047 041	052	048	046 037	055	066	084 078	285 290
300	020	029	033	032	028	028	032	038		300
315			018			022		***		315
335			015			020			012	335
			ALPHA •	4.79,	PHI = 0.0)• BODY	ALONE			
			ALPHA •	9.7 9 ,	-		ALONE			THETA
TMETA Deg	C•10	0.20	АLРНА • 0.30	4.79, 0.40	PHI = 0.0 CP AT X/L: 0.50		ALDNE	Q.85	0.95	THETA DEG
DEC			0.30	0.40	CP AT X/L:	0.60	0.70			DEG
0 F G	6.10 037	0.20 02°	0.30 036		CP AT X/L	0.60		0.85 015	005	0 £ G
0 E G 2 5			0.30 036 038	0.40	CP AT X/L:	0.60 030 043	0.70			DEG
0 F G			0.30 036	0.40	CP AT X/L:	030 043 043 101	0.70		005 025	0 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70	037	02ª 098	6.30 036 038 050 111 113	0.40 040 112	CP AT X/L- 0.50 042	030 043 043 101 146	0.70 044 064	015	005 025	0 t G 25 45 60 70
0 E G 2 5 4 5 6 0 7 0 7 5	037	02°	0.30 036 038 050 111 113	0.40	CP AT X/L: 0.50 042	0.60 030 043 043 101 146 137	0.70 044	015	005 025 113 111	0
DEG 0 25 45 60 70 75	037 082 042	02° 098 114	0.30 036 038 050 111 113 115	0.40 040 112 122	CP AT x/L- 0.50 042 115 129	0.60 030 043 043 101 146 137 126	0.70 044 064	015	005 025	0 t G 25 45 60 70
0 E G 2 5 4 5 6 0 7 0 7 5	037	02ª 098	0.30 036 038 050 111 113	0.40 040 112	CP AT X/L- 0.50 042	0.60 030 043 043 101 146 137 126 124	0.70 044 064 150 133	015 078 126 132	005 025 113 111 101 106 113	0 t G 25 45 60 70 75 80 85
DEG 0 25 45 60 70 75 80 85 90	037 082 042	02° 098 114 047	G.30036038050111113115128096024 .057	0.40 040 112 122 135	CP AT x/L- 0.50 042 115 129 126	0.60 030 043 043 101 146 137 126 124 122	0.70 044 064 150	015 078 126	005 025 113 111 101 106 113 110	0 t G 25 45 60 70 75 80 85 90
0 25 45 60 70 75 80 85 90 95 100	037 082 042 016 048 077	02 ^p 096114047 .013	G.30036038050111113115128096024 .057	0.40 040 112 122 135 051	CP AT x/L- 0.50 042 115 129 126 084 .014	030 043 043 101 146 137 126 124 122 020	0.70 044 064 150 133 096	015 078 126 132 134	005 025 113 111 101 106 113 110	0 t G 25 45 60 70 75 80 85 90 95
0 25 45 60 70 75 80 85 90 95 100 105	037 082 042 .016 .048	02 ^p 096114047	6.30036038050111113115128096024 .057 .096	0.40 040 112 122 135 051	CP AT x/L- 0.50 042 115 129 126 084	0.60 030 043 043 101 146 137 126 124 122 020 .045	0.70 044 064 150 133	015 078 126 132	005 025 113 111 101 106 113 110	0 t G 25 45 60 70 75 80 85 90
0 25 45 60 70 75 80 85 90 95 100 105 110	037 082 042 016 .048 .077	02 ^p 096114047 .013	G.30036038050111113115128096024 .057	0.40 040 112 122 135 051	CP AT x/L- 0.50 042 115 129 126 084 .014	030 043 043 101 146 137 126 124 122 020 .045 .070	0.70 044 064 150 133 096	015 078 126 132 134	005 025 113 111 101 106 113 110	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110
0 25 45 60 70 75 80 85 90 95 110 120 135	037 082 042 016 048 077	02° 098 114 047 .013 .069	6.30036038050111113115128096024 .057 .096 .113 .119 .122	0.40 040 112 122 135 051 .034	CP AT x/L- 0.50042115129126084 .014	030 043 043 101 146 137 126 122 020 .045 .070	0.70 044 064 150 133 096	015 078 126 132 134 113	005 025 113 111 100 113 110 113 105 109	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110 120
0 25 45 60 70 75 80 85 90 95 100 120 125 155	037082042016 .048 .077 .114	02° 098 114 047 .013 .069 .119	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118	0.40 040 112 122 135 051 .034 .104	CP AT x/L- 0.50042115129126084 .014 .065	030 043 043 101 146 137 126 124 122 020 .045 .070	0.70 044 064 150 133 096 .018	015078126132134113 .001	005 025 113 111 101 106 113 110 113 105 107	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135
0 25 45 60 70 75 80 85 90 105 110 120 135 155 180	037 082 042 016 .048 .077	02° 098 114 047 .013 .069	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118 .119	0.40 040 112 122 135 051 .034	CP AT x/L- 0.50042115129126084 .014	0.60 030 043 043 101 146 137 126 124 122 020 .045 .070 .081 .090	0.70 044 064 150 133 096	015 078 126 132 134 113	005 025 113 111 100 113 110 113 105 109	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205
0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205	037082042016 .048 .077 .114	02° 098 114 047 .013 .069 .119	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118	0.40 040 112 122 135 051 .034 .104	CP AT x/L- 0.50 042 115 129 126 084 .014 .085 .097	0.60 030 043 043 101 146 137 126 124 122 020 .045 .070 .081 .090	0.70 044 064 150 133 096 .018 .068	015078126132134113 .001	005 025 113 111 101 106 113 110 113 105 109	0 t G 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225
0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240	037082042016 .048 .077 .114	02° 098 114 047 .013 .069 .119	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118 .119 .120 .121 .123	0.40 040 112 122 135 051 .034 .104	CP AT x/L- 0.50042115129126084 .014 .065	0.60 030 043 043 101 146 137 126 124 122 020 .045 .070 .090 .094	0.70 044 064 150 133 096 .018	015078126132134113 .001	005 025 113 111 100 113 110 113 105 109	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 180 205 225 240
0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205 225 240 250	037082042042016048077114134133	02° 096 114 047 .013 .069 .119 .131 .129	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118 .119 .120 .121	0.40 040 112 122 135 051 .034 .104 .114	CP AT x/L- 0.50042115129126084 .014 .065 .097	030 043 043 101 146 137 126 122 020 .045 .070 .091 .090 .094 .096	0.70 044 064 150 133 096 .018 .068	015078126132134113 .001 .109	005 025 113 111 100 113 110 113 105 109	0 LG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225
0 25 45 60 770 775 80 85 90 90 100 120 135 155 180 225 240 255 255	037082042016048077114134	02° 098 114 047 .013 .069 .119 .131	G.30036038050111113115128096024057024057024113119122121123123	0.40 040 112 122 135 051 .034 .104 .114	CP AT x/L- 0.50 042 115 129 126 084 .014 .085 .097	0.60 030 043 043 101 146 137 126 124 122 020 .045 .070 .081 .090 .094 .096	0.70 044 064 150 133 096 .018 .068	015078126132134113 .001	005 025 113 111 100 113 110 113 105 109	0 t G 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 180 205 225 240
0 25 45 60 70 75 80 85 90 100 110 110 120 135 155 226 255 260	037082042042016048077114134133	02° 096 114 047 .013 .069 .119 .131 .129	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .118 .119 .120 .121 .123	0.40 040 112 122 135 051 .034 .104 .114	CP AT x/L- 0.50042115129126084 .014 .065 .097	0.60030043043101146137126122020 .045 .070 .081 .090 .094 .096 .095 .094 .096 .068 .068019	0.70 044 064 150 133 096 .018 .068	015078126132134113 .001 .109	005 025 113 111 100 113 110 113 105 109	0 LG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 255 205
0 25 45 60 770 75 80 85 90 95 1100 1200 135 155 180 225 240 255 260 265 270	037082042042016048077114133135113077046	02° 096 114 047 .013 .069 .119 .131 .129 .129 .116 .059 .010	G.30036038050111113115128096024057096113119122121118119120121123096050022	0.40040112122135051 .034 .104 .114 .111 .108 .098 .031060	CP AT x/L- 0.50042115129126084014085097104097081009095	-0.60 -0.043 -0.043 -101 -146 -137 -126 -122 -020 -045 -070 -081 -090 -094 -090 -080 -088 -043 -019 -134	0.70 044 064 150 133 096 .018 .068 .094 .063 .018 097	015078126132134113 .001 .109 .000110130	005025113111101106113110113110113105107123069105111112115110	0 LG 0 25 45 60 75 80 85 90 95 100 120 120 135 155 180 205 225 240 255 205 257 265
0 25 45 60 70 75 80 85 90 100 110 110 120 135 155 225 226 265 275 275	037082042016 .048 .077 .114 .134 .133 .135 .113	02°096114047 .013 .069 .119 .131 .129 .129 .116	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .123 .123 .096 .050022090	0.40 040 112 122 135 051 .034 .104 .114 .111	CP AT x/L- 0.50042115129126084 .014 .065 .097 .104 .097	0.60 030 043 043 101 146 137 126 124 122 025 .045 .070 .081 .090 .094 .096 .096 .096 .068 .043 019 134 117	0.70 044 064 150 133 096 .018 .068	015078126132134113 .001 .109 .000110	005 025 025 113 111 106 113 110 113 105 109 123 069 105 111 112 115 110	0 kg 0 25 45 60 70 75 80 85 90 105 110 120 135 155 125 225 225 255 260 275
0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225 246 256 270 265 275 280	037082042042016048077114134133135113077046020	02°096114047 .013 .069 .119 .131 .129 .129 .116 .058 .010036	6.30036038050111113115128096024 .057 .013 .119 .122 .121 .118 .119 .120 .121 .123 .096 .050022090125	0.40040112122135051 .034 .104 .114 .111 .108 .098 .031060133	CP AT x/L- 0.50042115129126084 .014 .065 .097 .104 .097 .081 .009095125	0.60030043043101146137126122020 .045 .070 .081 .090 .094 .096 .095 .094 .096 .083019134117123	0.70 044 064 150 133 096 .018 .068 .094 .063 .018 097	015076126132134113 .001 .109 .000110130133	005025113111101106113110113110113105107123069105111112115110	0 LG 0 25 45 60 75 80 85 90 95 100 120 120 135 155 180 205 225 240 255 205 257 265
0 25 45 60 770 75 80 85 90 95 1100 1200 135 155 285 225 240 255 265 275 280 285	037082042042016048077114133135113077046	02° 096 114 047 .013 .069 .119 .131 .129 .129 .116 .059 .010	G.30036038050111113115128096024 .057 .096 .113 .119 .122 .121 .123 .123 .096 .050022090	0.40040112122135051 .034 .104 .114 .111 .108 .098 .031060	CP AT x/L- 0.50042115129126084014085097104097081009095	0.60 030 043 043 101 146 137 126 124 122 025 .045 .070 .081 .090 .094 .096 .096 .096 .096 .096 .083 117 123 124	0.70044064150133096 .018 .068 .094 .063 .018097134153	015078126132134113 .001 .109 .000110130133127	005025113111101106113110105109105109105111112115110119113	0 kg 0 25 45 60 70 75 85 90 85 90 105 110 135 155 125 225 255 270 265 280 290
0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225 246 256 270 265 275 280	037082042042016048077114134133135113077046020	02°096114047 .013 .069 .119 .131 .129 .129 .116 .058 .010036	G.30036038050111113115128096024 .057 .012 .113 .119 .122 .121 .118 .119 .120 .121 .123 .050022090125113111107	0.40040112122135051 .034 .104 .114 .111 .108 .098 .031060133	CP AT x/L- 0.50042115129126084 .014 .065 .097 .104 .097 .081 .009095125	. 0.60 030 043 101 146 137 126 122 020 .045 .070 .091 .090 .094 .096 .096 .096 .096 .096 .019 134 117 122 122 122 122 124 122 124 122 124 123 132 114 124 124 125 124 126 127 123 132 141 102	0.70 044 064 150 133 096 .018 .068 .094 .063 .018 097	015076126132134113 .001 .109 .000110130133	005025113111101106113110105107107108111112115110111112115110113115	0 LG 0 25 45 60 70 75 80 85 90 105 110 135 155 180 205 225 240 255 270 275 280 285 290
0 25 45 60 70 75 80 85 90 100 110 110 120 135 155 225 226 225 2270 225 229 290	037082042016 .048 .077 .114 .133 .135 .113 .077 .046 .020035	02"098114047 .013 .069 .119 .131 .129 .129 .116 .059 .010036	G.30036038050111113115128096024057 .096 .113 .119 .122 .121 .123 .123 .096 .050022090125113111	0.40040112122135051 .034 .104 .114 .111 .108 .098 .031060133	CP AT x/L- 0.50042115129126084 .014 .085 .097 .104 .097 .104 .097 .104	0.60 030 043 043 101 146 137 126 124 122 025 .045 .070 .081 .090 .094 .096 .096 .096 .096 .096 .083 117 123 124	0.70044064150133096 .018 .068 .094 .063 .018097134153	015078126132134113 .001 .109 .000110130133127	005025113111101106113110105107107108111112115110111112115110113115	0 kg 0 25 45 60 70 75 85 90 85 90 105 110 135 155 125 225 255 270 265 280 290

ORIGINAL PAGE 15 OF POOR QUALITY

TABLE 2.- Continued

(a) Continued

ALPHA = 15.00, PH\$ = 0.0, BODY ALDNE

THETA DEG										
DEG					CP AT X/L.					THETA
	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
_										
0 25	043	046	056 062	066	070	063	075	051	028	0
45			149			080 110			06	25 45
60	129	139	147	158	164	168	162	157		60
70			144			164	••••	• • • • • • • • • • • • • • • • • • • •	116	70
75	084	1-8	145	147	146	151	161	149	115	75
80			152			143			109	80
85	012	085	131	156	143	141	149	140	123	85
90 95	.032	016	052 .063	077	102	138	- 080	_ 120	127	90
100	.076	.069	.130	.037	•023	011 .087	089	138	124 127	95 100
105	.142	.161	.170	.162	.147	.120	.067	090	121	105
110			.100		-	.148			134	110
120	.196	.204	.203	.191	-176	.163	.130	.056		120
135			.208			.171				135
155 186	.217	.212	.208	.196	103	•174	171	.194	.132	155
205	* 2 1 1	• • • • •	.208 .207	•140	.183	.174	.171	•144	.204 .138	180 205
225			.204			.173			• • • •	225
240	.195	.206	.199	.192	.172	.166	.135	.053		240
250			.187			.149			127	250
255	.140	.161		.164	•143	.128	•069	091	126	255
260	.079	060	.128	0.11	0.20	.084			124	260
265 270	.029	.058 013	.052 043	.043 082	.020 110	010 149	085	137	127 119	265 270
275	009	073	126	158	140	133	146	140	119	275
280	1001	10.3	146	•••		142	-1140	- • 1 • 0	113	200
285	073	144	140	148	143	149	163	148	111	285
290			140			162			114	290
300	127	128	141	158	158	266	160	152		300
315			149			111			***	315
335			061			079			059	335
				- 10 07	04. a 0.0					
4. 5-			ALPHA	• 20.02,	0.0 • 129		/ ALONE			* 11.5 * -
THETA	ć 10	0.20			CP AT X/L=	ı		0.85	0.95	THE TA
THETA DEG	C.10	0.20	ALPHA 0•30	• 20.02, 0.46			C.70	0.85	0.95	THE TA DEG
DEC			0.30	0.46	CP AT X/L=	0.60	0.70			
	C.10 053	0.20 077			CP AT X/L=	ı		Q.85 682	0.95 062 107	DEG
DEC	053	077	0.30 092 122 168	0.46 105	CP AT X/L= C.50 105	0.60 094 125 161	0.70 106	682	062	DEG 0 25 45
DEG 0 25 45 60			0.30 092 122 168 165	0.46	CP AT X/L=	0.60 094 125 161 179	0.70		062 107	DEG 0 25 45 60
DEG 0 25 45 60 70	053 159	077 158	0.30 092 122 168 165 157	0.46 105 172	CP AT X/L= C.50 105	0.60 094 125 161 179 176	G.70 106 176	082	062 107	0 25 45 60 70
DEG 0 25 45 60 7G 75	053	077	0.30 092 122 168 165 157	0.46 105	CP AT X/L= C.50 105	0.60 094 125 161 179 176 165	0.70 106	682	062 107 128 124	0 25 45 60 70
DEG 0 25 45 60 76 75 80	053 159 114	077 158 166	0.30092122168165157158161	0.46 105 172	CP AT X/L= C.50 105	0.60 094 125 161 179 176 165 159	G.70 106 176 172	082 164 158	062 107 128 124 121	0 25 45 60 70
DEG 0 25 45 60 7G 75	053 159	077 158	0.30 092 122 168 165 157	0.4C 105 172 162	CP AT X/L= C.50 105 175 160	0.60 094 125 161 179 176 165 159 157	G.70 106 176	082	062 107 128 124 121 136 137	DEG 0 25 45 60 70 75 80 85
DEG 0 25 45 60 76 75 80 65 90	053 159 114 034	077 158 166 111	0.30092122168165157158161152069	0.46 105 172 162 169	CP AT X/L=	0.60 094 125 161 179 165 159 157 157	G.70 106 176 172	082 164 158	062 107 128 124 121 136 137 134	DEG 0 25 45 60 70 75 60 95
DEG 0 25 45 60 76 75 80 65 90	053 159 114 034 .018 .076	077 158 166 111 033 .082	0.30092122168165157158161152069172	0.46 105 172 162 169 091	CP AT X/L= C.50105175160158112 .041	0.60 094 125 161 179 176 159 157 157 147	0.70 106 176 172 162 074	082 164 158 151 154	062 107 128 124 121 136 137 134	DEG 0 25 45 60 70 75 60 65 90 95
DEG 0 25 45 60 76 75 80 65 90 95	053 159 114 034 .018	077 158 166 111 033	0.30092122168165157158161152069 .081 .172	0.46 105 172 162 169 091	CP AT X/L=	0.60 094 125 161 179 165 159 157 147	G.70 106 176 172 162	082 164 158 151	062 107 128 124 121 136 137 134 136	DEG 0 25 45 60 70 75 80 85 90 95
DEG 0 25 45 60 76 75 80 65 90 95 100	053 159 114 034 .018 .076 .173	077158106111033 .082 .216	0.30092122168165157158161152069 .081 .172 .237	0.46 105 172 162 169 091 051	CP AT X/L=	0.60 094 125 161 179 176 157 157 157 147 .006 .139 .139	G.70106176172162074 .133	082 164 158 151 154 059	062 107 128 124 121 136 137 134	0 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7
DEG 0 25 45 60 76 75 80 65 90 95	053 159 114 034 .018 .076	077 158 166 111 033 .082	0.30092122168165157158161152069 .081 .172	0.46 105 172 162 169 091	CP AT X/L= C.50105175160158112 .041	0.60 094 125 161 179 165 159 157 147	0.70 106 176 172 162 074	082 164 158 151 154	062 107 128 124 121 136 137 134 136	0FG 0 25 45 60 70 75 80 95 90 95 100 105 110
DEG 0 25 45 60 76 75 80 65 90 95 100 105 110 120 135	053 159 114 034 .018 .076 .173 .268	077158166111033 .082 .216	0.30092122168165157158161152069 .091 .172 .237 .269 .398	0.46 105 172 162 169 091 051	CP AT X/L=	0.60 094 125 161 179 165 159 157 147 006 .139 .199 .230	G.70106176172162074 .133 .224	082 164 158 151 154 059	062 107 128 124 121 136 137 134 136 137	0 0 25 45 60 70 75 60 95 100 105 110 129 135 15 5
DEG 0 25 45 60 76 75 80 65 90 100 105 110 120 135 155	053 159 114 034 .018 .076 .173	077158106111033 .082 .216	0.30092122168165157158161152069 .172 .237 .269 .308 .310	0.46 105 172 162 169 091 051	CP AT X/L=	0.60 094 125 161 179 159 159 157 167 .006 .139 .230 .256 .269	G.70106176172162074 .133	082 164 158 151 154 059	062 107 128 124 121 136 137 134 136 132 142	0 25 45 60 70 75 60 65 90 100 105 110 110 120 135 135 135 135 135 135 135 135 135 135
DEG 0 25 45 60 76 75 80 65 90 95 100 105 110 120 135 155 180 205	053 159 114 034 .018 .076 .173 .268	077158166111033 .082 .216	0.30092122168165157158161152069 .081 .172 .237 .269 .310 .312	0.46 105 172 162 169 091 051	CP AT X/L=	0.60094125161179176157157147 .006 .139 .230 .256 .269 .277	G.70106176172162074 .133 .224	082 164 158 151 154 059	062 107 128 124 121 136 137 134 136 137	0 E G C C C C C C C C C C C C C C C C C C
DEG 0 25 45 60 76 75 80 65 90 95 100 110 120 135 155 180 205	053159114034 .018 .076 .173 .268	077158166111033 .082 .216 .298	0.30 092 122 168 165 157 158 161 152 069 .081 .172 .237 .269 .296 .310 .312 .308	0.46 105 172 162 169 091 051 291	CP AT X/L=	0.60094125161179157159157147 .006 .139 .230 .256 .277	G.70106176172162074 .133 .224	082 164 158 151 154 059 .123	062 107 128 124 121 136 137 134 136 132 142	0 E G
DEG 0 25 45 60 76 75 80 65 90 100 110 120 135 155 180 205 225	053 159 114 034 .018 .076 .173 .268	077158166111033 .082 .216	0.30092122168165157158161152069 .081 .172 .237 .269 .308 .310 .312 .312	0.46 105 172 162 169 091 051	CP AT X/L=	0.60 094 125 161 179 157 159 157 157 230 .230 .256 .269 .277	G.70106176172162074 .133 .224	082 164 158 151 154 059	062 107 128 124 121 136 137 134 136 132 142	0 E G
DEG 0 25 45 60 76 75 80 65 90 95 100 110 120 135 155 180 205	053159114034 .018 .076 .173 .268	077158166111033 .082 .216 .298	0.30 092 122 168 165 157 158 161 152 069 .081 .172 .237 .259 .296 .310 .312 .308 .298 .272	0.46 105 172 162 169 091 051 291	CP AT X/L=	0.60094125161179157159159159157157277 .269 .277	G.70106176172162074 .133 .224	082 164 158 151 154 059 .123	062 107 128 124 121 136 137 134 132 142	0 EG 0 25 45 60 70 75 60 95 90 100 120 135 135 135 225 240 255 255
DEG 0 25 45 60 76 75 80 65 90 100 110 120 135 155 180 205 225 240 250 250 260	053159114034 .018 .076 .173 .268 .327 .271	077158166111033 .082 .216 .298 .325	0.30092122168165157158161152069 .091 .172 .237 .269 .298 .310 .312 .312 .308 .298 .272	0.46 105 172 162 169 051 .236 .291	CP AT X/L=	0.60094125161179165159157147 .006 .139 .230 .256 .269 .277 .273 .260 .232 .201 .138	G.70106176172162074 .133 .224 .270 .224	082164158151154059 .123 .296 .120062	062 107 128 124 121 136 137 134 132 142 .216 .305 .223	0 E G
DEG 0 25 45 60 76 75 80 65 90 100 105 110 120 135 155 180 205 225 240 250 265	053159114034 .018 .076 .173 .268 .327 .271 .175	077158166111033 .082 .216 .298 .325 .300 .217	0.30092122168165157158161152069 .081 .172 .237 .269 .310 .312 .308 .298 .272	0.46 105 172 162 169 091 .051 .236 .291 .307 .295	CP AT X/L=	0.60094125161179157157157167 .230 .256 .269 .277 .273 .260 .232 .201 .138	G.70106176172162074 .133 .224 .270	082 164 158 151 154 059 .123 .296	062107 128124121136137134132142 .216 .305 .223 13714135137	0 25 45 60 70 75 80 85 90 100 105 110 135 120 255 225 225 225 225 225 225 225 225 2
DEG 0 25 45 60 76 75 80 65 90 95 100 105 110 120 135 155 180 205 225 240 250 265 270	053159114034 .018 .076 .173 .268 .327 .271 .175	077158166111033 .082 .216 .298 .325 .300 .217 .065017	0.30092122168165157158161152069 .081 .172 .269 .298 .310 .312 .308 .298 .272	0.4C 105 172 162 169 091 091 291 307 295 240 098	CP AT X/L=	0.60094125161179157157157147 .006 .139 .230 .256 .277 .275 .273 .260 .232 .138156	G.70106176172162074 .133 .224 .270 .224 .137068	082164158151154059 .123 .296 .120062150	062 107 128 124 121 136 137 136 132 142 	0 E G
DEG 0 25 45 60 76 75 80 65 90 100 110 120 135 155 180 205 240 250 255 260 275	053159114034 .018 .076 .173 .268 .327 .271 .175	077158166111033 .082 .216 .298 .325 .300 .217	0.30092122168165157158161152069 .091 .172 .237 .269 .298 .310 .312 .308 .298 .272 .173 .062051142	0.46 105 172 162 169 091 .051 .236 .291 .307 .295	CP AT X/L=	0.60094125161179159157147 .006 .139 .230 .256 .269 .277 .273 .260 .232 .201 .138 .C09156	G.70106176172162074 .133 .224 .270 .224	082164158151154059 .123 .296 .120062	062 107 128 124 121 136 137 134 132 142 	0 EG 0 25 45 60 70 75 60 65 90 105 110 127 135 125 240 250 255 260 265 275
DEG 0 25 45 60 76 75 80 65 90 95 100 105 110 120 135 155 180 205 225 240 250 265 270	053159114034 .018 .076 .173 .268 .327 .271 .175	077158166111033 .082 .216 .298 .325 .300 .217 .065017	0.30092122168165157158161152069 .081 .172 .269 .298 .310 .312 .308 .298 .272	0.4C 105 172 162 169 091 091 291 307 295 240 098	CP AT X/L=	0.60094125161179157157157157230 .256 .277 .275 .269 .277 .275 .260 .232 .138 .109156156156	G.70106176172162074 .133 .224 .270 .224 .137068	082164158151154059 .123 .296 .120062150	062 107 128 124 121 136 137 136 132 142 	0 E G
DEG 0 25 45 60 76 75 80 65 90 100 110 120 135 155 180 205 240 250 255 240 275 280 285 290	053159114034 .018 .076 .173 .268 .327 .271 .175 .086 .019037	077158166111033 .082 .216 .298 .325 .300 .217 .065017099160	0.30092122168165157158161152069 .091 .172 .237 .269 .308 .310 .312 .308 .298 .272 .173 .0062051142154154	0.4C105172162169091 .051 .236 .291 .307 .295 .240 .058075171	CP AT X/L=	0.60094125161179159157157157157157130230256269277273260232216156156156157163	G.70106176172162074 .133 .224 .270 .224 .137068160173	082164158151154059 .123 .296 .120062150150	062107128124121136137136132142142137141371413714	0 E G
DEG 0 25 45 60 75 80 85 90 100 110 120 135 155 180 205 240 250 265 275 280 280 280 280 280 280 280 280	053159114034 .018 .076 .173 .268 .327 .271 .175 .086 .019037	077158166111033 .082 .216 .298 .325 .300 .217 .065017099	0.30092122168157158161152069 .081 .172 .237 .269 .310 .312 .308 .298 .272 .173 .062051142154154155	0.4C 105 172 162 169 091 .051 .246 .291 .307 .295 .240 .098 095 171	CP AT X/L=	0.60094125161179157157157167230256269277273260232201138209156146157163173	0.70106176172162074 .133 .224 .270 .224 .137068160	082164158151154059 .123 .296 .120062150	06210712812412113613713413613214221630522313714135137130132129124	DEG 0 25 45 60 70 75 60 65 90 105 110 135 1: () 2:55 2:50 2:50 2:50 2:50 2:70 2:75 2:80 2:85 2:70 2:85 2:80 2:85 2:80 2:80 2:80 2:80 2:80 2:80 2:80 2:80
DEG 0 25 45 60 76 76 80 65 90 100 1120 135 155 180 205 240 255 240 275 280 285 290 300 315	053159114034 .018 .076 .173 .268 .327 .271 .175 .086 .019037	077158166111033 .082 .216 .298 .325 .300 .217 .065017099160	0.30092122168165157158161152069 .081 .172 .269 .308 .310 .312 .308 .298 .272 .173 .002051142154155159165	0.4C105172162169091 .051 .236 .291 .307 .295 .240 .058075171	CP AT X/L=	0.60094125161176157157157157147 .230 .2569 .277 .273 .2602 .273 .2609 .2771467156717516371751637	G.70106176172162074 .133 .224 .270 .224 .137068160173	082164158151154059 .123 .296 .120062150150	06210712812412113613713413613214221630522313714135137130132129124123	0 EG 0 25 45 60 75 60 95 90 95 100 105 110 127 135 240 255 240 255 260 275 260 265 270 275 280 300 315
DEG 0 25 45 60 75 80 85 90 100 110 120 135 155 180 205 240 250 265 275 280 280 280 280 280 280 280 280	053159114034 .018 .076 .173 .268 .327 .271 .175 .086 .019037	077158166111033 .082 .216 .298 .325 .300 .217 .065017099160	0.30092122168157158161152069 .081 .172 .237 .269 .310 .312 .308 .298 .272 .173 .062051142154154155	0.4C105172162169091 .051 .236 .291 .307 .295 .240 .058075171	CP AT X/L=	0.60094125161179157157157167230256269277273260232201138209156146157163173	G.70106176172162074 .133 .224 .270 .224 .137068160173	082164158151154059 .123 .296 .120062150150	06210712812412113613713413613214221630522313714135137130132129124	DEG 0 25 45 60 70 75 60 90 100 1105 110 135 1 5 225 265 275 280 285 290 300

TABLE 2.- Continued ORIGINAL PAGE 13
OF POOR QUALITY

(a) Continued

ALPHA = 25.00, PHI = 0.0, SODY ATCHE

				CP AT X/L+					THETA
0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
075	114	122	134	133	121	136	122	116	0
•••	•	152			153			139	25
	• • •		102	104					45
173	184		182	184		163	170	140	60 70
138	173	170	175	175	180	160	167	141	75
		172			175			135	80
			183			176	161		85
						054	167		70 95
••••	•••			****	.202		• • • • • • • • • • • • • • • • • • • •		100
.203	•1.71	.309	.316	-31.	.283	.210	021	145	105
340	304		404	202		220	201	174	110 120
. 340	. 340		• + 0 +	.303		• 3 3 0	•201		135
		.432			.391			.309	155
. 457	. 447	. 436	.434	.406		•3.00	.410	.415	160
								.318	205 225
.354	.403		.406	-380	.367	.330	.199		240
		.365			.329			124	250
.208	.276		.321	•306		.215	027		255
-092	- 072		- 076	-065		065	165		260 265
.020	017		102	120	156	••••	•••	139	276
056	106	~.150	185	171	157	173	160	143	275
- 122	14.7		_ 170	- 172		- 102	- 147		280
123	101		1/6	112		112	167		285 290
171	160	170	183	177	183	161	169		300
		173			176				315
		~.152			152			126	335
		ALPHA .	4,94,	PHI = 22.5,	8004	ALONE			
		ALPHA =	4,94,		4008	ALONE			THE 74
0.10	0.20			CP AT X/L=			0.85	0.95	TMETA Deg
0.10	0.20	ALPHA .	0.40		0.63	0.70	0.85	0.95	THETA DEG
0.10	0.20 006	0.3C 013		CP AT X/L=	0.60		0.85 001	.001	DFG O
		0.3C 013 012	0.40	CP AT X/L= 0.50	0.60 013 022	0.70			DFG 0 25
009	006	0.3C 013 012 015	0.40	CP AT X/L= 0.50 018	0.60	0.70		.001	DFG O
		0.3C 013 012 015 022 032	0.40 -,018 023	CP AT X/L= 0.50 018	0.60 +.013 022 023 027 033	0.70 022 030	001 047	.001 022	DFG 0 25 45 60 70
009	006	0.3C 013 012 015 022 032 037	0.40	CP AT X/L= 0.50 018	0.60 013 022 023 027 033 040	0.70	001	.001 022 083 081	DEG 0 25 45 60 70 75
009 019 .001	024 028	0.3C 013 012 015 022 032 037	0.40 018 023 040	CP AT X/L= 0.50018026041	0.60 +.013 022 023 027 033 040 052	0.70 022 030 050	001 047 072	083 081 069	DEG 0 25 45 60 70 75
009	006 024	0.3C 013 012 015 022 032 037	0.40 -,018 023	CP AT X/L= 0.50 018	0.60 013 022 023 027 033 040	0.70 022 030	001 047	083 081 069 069	DFG 0 25 45 60 70 75 80 81
009 019 .001	006 024 028 001	0.3G 013 012 015 022 037 040 024 .009	0.40 018 023 040	CP AT X/L= 0.50018026041063	0.60013022023027033040052075073025	0.70 022 030 050	001 047 072	083 081 069 069 067	0 25 45 60 70 75 80 85 113 95
009 019 .001 .030 .045	006 024 028 001 .028 .048	0.3C 013 012 015 022 037 040 024 .009	0.40 018 023 040 046 012	CP AT X/L= 0.50018026041063038007	0.60013022023027033040052075073025	0.70 022 030 050 093	001 047 072 103 086	022 083 081 069 067 067 061	DFG 0 25 45 60 70 75 80 81 10
009 019 .001 .030	006 024 028 001	0.3G 013 012 015 022 037 040 024 .009 .040	0.40 018 023 040 046	CP AT X/L= 0.50018026041063038	0.60013022023027033040052075073025	0.70 022 030 050 093	001 047 072 103	083 081 069 069 067	0 25 45 60 70 75 80 85 113 95
009 019 .001 .030 .045	006 024 028 001 .028 .048	0.3G013012015022037040024 .009 .040 .050 .051	0.40 018 023 040 046 012	CP AT X/L= 0.50018026041063038007	0.00013022023027033040052075073025003017024	0.70 022 030 050 093	001 047 072 103 086	022 083 081 069 067 061 053	0 25 45 60 70 75 80 81 10 105 110 120
009 019 .001 .030 .045 .055	006 024 028 001 .028 .048	0.3G013012015022037040024039 .040 .050 .051 .051	0.40 018 023 040 046 012 .023	CP AT X/L= 0.50018026041063038007	0.60013022023027033040052075073025 .003 .017 .024 .029	0.70 022 030 050 093 090	001 047 072 103 086	022 083 081 069 067 061 053 058 062	0 25 45 60 70 75 80 85 100 105 110 120 135
009 019 .001 .030 .045 .055	006 024 028 001 .028 .048 .058	0.3C013012015022037040024009040050251052055	0.40 018 023 040 046 012 .023	CP AT X/L= 0.50018026041063038007032	0.00013022023027033040052075073025003017024	0.70 022 030 050 093 090 024	001 047 072 103 086 099 045	001 022 083 081 069 067 061 053 062	0 25 45 60 70 75 80 85 100 120 120 125 155
009 019 .001 .030 .045 .055	006 024 028 001 .028 .048	0.3G013012015022037040024039 .040 .050 .051 .051	0.40 018 023 040 046 012 .023	CP AT X/L= 0.50018026041063038007	0.60013022023027033040052075073025 .003 .017 .024 .029	0.70 022 030 050 093 090	001 047 072 103 086	022 083 081 069 067 061 053 058 062	0 25 45 60 70 75 80 85 100 105 110 120 135 155 180 205
009 019 .001 .030 .045 .055 .066 .064	006 024 028 001 .028 .046 .058 .055	0.3G013012015022037040024009040050251055055056057	0.40 018 023 040 046 012 .027 .044 .048	CP AT X/L= 0.50018026041063038007037	0.60013022023027033040052075073025 .003 .017 .024 .029 .033 .035	0.70 022 030 050 093 090 024 .010	001 047 072 103 086 099 045	022083081069067061053058062	0 25 45 60 70 75 80 81 10 10 12 0 12 15 18 0 22 5
009 019 .001 .030 .045 .055	006 024 028 001 .028 .048 .058	0.3G01301201502203704002409051051055055056057	0.40 018 023 040 046 012 .023	CP AT X/L= 0.50018026041063038007032	0.60013022023027033040075073025003 .017024 .029 .033 .035	0.70 022 030 050 093 090 024	001 047 072 103 086 099 045	022083081069067061053062000	0 25 45 60 70 75 80 85 100 105 110 120 135 150 205 225 225 240
009019 .001 .030 .045 .055 .066 .064	006 024 028 001 .028 .046 .058 .055	0.3G013012015022037040024009040050251055055056057	0.40 018 023 040 046 012 .027 .044 .048	CP AT X/L= 0.50018026041063038007037	0.60013022023027033040052075073025 .003 .017 .024 .029 .033 .035	0.70 022 030 050 093 090 024 .010	001 047 072 103 086 099 045	001 022 083 081 069 067 061 053 058 062	0 25 45 60 70 75 80 81 10 120 125 180 225
009019 .001 .030 .045 .055 .066 .064 .062	006 024 028 001 .028 .048 .058 .055 .054 .064	0.3C01301201502203704002409040051055055055056057061068	0.40018023040046012 .023 .044 .048 .049	CP AT X/L= 0.50018026041063038007032037043	0.60013022023027033040075075025003017024029033035036036036037029038036036037029	0.70 022 030 050 093 090 024 .010 .035	001047072103086099045046028110	001 022 083 081 069 067 061 053 062 069 069 069	0 25 45 60 70 75 80 81 100 105 110 120 135 150 205 240 25 260
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101	006024028001 .028 .048 .058 .055 .054 .064 .081	0.3C013012015022037040024099 .040 .050 .051 .051 .052 .055 .056 .057 .061 .068	0.40018023040046012 .027 .044 .048 .049 .053 .061	CP AT X/L= 0.50018026041063038007 .032 .037 .043	0.60 -013 -022 -023 -027 -033 -040 -052 -075 -073 -025 -033 -036 -036 -036 -033 -039 -039 -039 -039 -039 -039 -039	0.70 022 030 050 093 090 024 .010	001 047 072 103 086 099 045 .046	001022083081069067061053058067061	0 25 45 60 70 75 80 85 100 105 120 125 25 25 25 26 0 26 5
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101 .096	006024028001 .028 .048 .058 .055 .054 .064 .081	0.3G013012015022037040024051 .055 .055 .055 .056 .057 .068 .078	0.40018023040046012 .027 .044 .049 .053 .061 .059	CP AT X/L= 0.50018026041063038007032037043	0.60013022023027033040075075025003017024029033035036036036037029038036036037029	0.70022030050093090024 .010 .035	001047072103086099045046028110	001 022 083 081 069 067 061 053 062 069 069 069	0 25 45 60 70 75 80 81 100 105 110 120 135 150 205 240 25 260
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101 .096 .065 .070	006024028001 .028 .048 .058 .055 .054 .064 .081 .080 .061	0.3G013012015022037040024099 .040050 .251 .055 .055 .056 .057 .061 .078 .078 .078	0.40018023040046012 .027 .044 .048 .049 .053 .061 .059 .020033	CP AT X/L= 0.50018026041063038007 .032 .037 .043 .044 .045036029058	0.60 -013 -022 -023 -027 -033 -040 -052 -073 -025 -033 -036 -036 -036 -036 -037 -029 -033 -036 -036 -036 -036 -036 -036	0.70022030050093090024 .010 .035 .017010072100	001047072103086099045046028110108114	001022083081069067061053058067067069067069069	0 25 45 60 75 80 81 100 105 120 125 225 240 251 250 265 270 275 280
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101 .096	006024028001 .028 .048 .058 .055 .054 .064 .081	0.3G013012015022037040050 .051 .055 .055 .056 .057 .068 .078 .073 .044 .001034046	0.40018023040046012 .027 .044 .049 .053 .061 .059	CP AT X/L= 0.50018026041063038007032037043	0.60 -013 -022 -023 -027 -033 -040 - 252 -075 -073 -025 -033 -037 -024 -033 -035 -036 -036 -037 -029 -029 -054 -077 -069 -062	0.70022030050093090024 .010 .035 .017010	001047072103086099045 .046028110108	001022083081069067061053058067065069069069069069069069	0 25 45 60 70 75 80 85 100 120 135 155 180 225 240 257 260 265 270 275 280 285
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101 .096 .065 .070	006024028001 .028 .046 .058 .055 .034 .064 .081 .080 .061 .034025	0.3G013012015022037040024037050055055055055056057061068078073044044043	0.40018023040046012 .027 .044 .048 .049 .053 .061 .059 .020033	CP AT X/L= 0.50018026041063038007032037043044045099058056	0.60 -013 -022 -023 -027 -033 -040 - 052 -075 -073 -025 .003 .017 .024 .029 .033 .035 .036 .037 .029 .022 .004 -077 -069 -0052	0.70022030050093090024 .010 .035 .017010072100071	001047072103086099045 .046028110108114053	001022083081069067061053058067067069067069069	0 25 45 60 70 75 80 81 100 105 110 120 135 180 205 270 265 270 285 290
009019 .001 .030 .045 .055 .066 .064 .062 .087 .101 .096 .065 .070	006024028001 .028 .048 .058 .055 .054 .064 .081 .080 .061	0.3G013012015022037040050 .051 .055 .055 .056 .057 .068 .078 .073 .044 .001034046	0.40018023040046012 .027 .044 .048 .049 .053 .061 .059 .020033	CP AT X/L= 0.50018026041063038007 .032 .037 .043 .044 .045036029058	0.60 -013 -022 -023 -027 -033 -040 - 252 -075 -073 -025 -033 -037 -024 -033 -035 -036 -036 -037 -029 -029 -054 -077 -069 -062	0.70022030050093090024 .010 .035 .017010072100	001047072103086099045046028110108114	001022083081069067061053058067065069069069069069069069	0 25 45 60 70 75 80 85 100 120 135 155 180 225 240 257 260 265 270 275 280 285
	173138054 .005 .0075 .203 .348 .457 .354 .208 .092 .056123	173	152173169177178179170170170170172054062039076 .075094101218203171309357348396427354457447436427354403427354403427354403427355427355427356222092072056106123167166171160170	172173169177178170170170170170175170175170175172054062039076101067203171209218203171309318396403425432457447436427354403404425436208276208276222092072056106123167165178166171160170173	1721731691771701381731701701751720541261641831740170750941011011170750941010670232182037139931831035734839640342532457447356427354403408405427354403408406356208	152178153178178178178178179170182184187186170170180170186187186172186172175180171188172180180171180170183175180171180170183175176183175176183175176183175176183175176183175176170183175176175176170183175176	152	152	172

TABLE 2.- Continued ORIGINAL PAGE 19 OF POOR QUALITY

			ALPHA =	9.93,	PHI • 22.5,	800v	ALONE			
TOF TA					CP AT X/L=					THETA
DFG	0.10	0.20	0.3(0.40	0.50	0.60	0.70	0.85	0.95	DEG
0 25	040	029	033 031	038	038	030 039	040	012	.003 037	0 25
45 60	066	071	036 055	050	043	040 043	048	078		45 60
70 75	056	093	095 099	109	121	104 137	142	122	108 107	70 75
8C			103		***	116			100	80
85 90	014 -010	076 530	115 065	111 092	110 116	108 112	124	113	103 085	65 90
95	-032	.0 9	-006	018	034	064	121	117	086	95
100 105	.068	, i .	.046 .070	.060	.049	.005 .036	011	129	095 093	100 105
110			.002			.053			093	110
1a: 135	.094	-101	.093	-082	.075	.068 .078	.045	624		120 135
155			.100			.084	_		.039	155
160 205	.119	.120	.104 .108	.093	.094	.090	.085	.099	.113 .078	180 205
555			.114			.093			••••	225
240 250	-158	.148	.124	-108	.104	.093 .091	-069	.013	- 120	240 250
255	.157	.158	•135	-116	.107	.086	.035	095	120 126	255
2			.134			.072			123	260
265 270	.128 .098	.117 .070	.102 .036	002	.064 037	.028 093	063	117	124 118	265 270
275	.068	.617	039	091	123	128	136	126	123	275
200 205	.006	079	093 121	126	122	127 130	142	146	101 091	280 285
290	-000	074	116	*****		127	- • 4 4 2		0e7	590
300	065	-,097	106	112	108	113	116	122		300
315 335			065 044			072 042			-010	315 335
			ALPHA .	14.93,	PHI = 22.5,	300 Y	AL ONE			
THETA					CP AT X/L+					THETA
DE¢	C.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	068	041	650	051	066	062	075	042	019	0
25 45			050 054			068 072			046	25 45
60	102	133	145	112	096	094	095	121		60
70 75	108	125	141 132	141	162	150 140	140	133	111 114	70 75
80			132			135			103	80
85 90	060 029	130 085	134 116	133 137	130 136	129 129	134	124	104 112	85 90
95	.005	012	020	047	055	083	127	121	110	95
10C 105	.059	.075	.042 .090	.089	.080	.015 .064	.010	122	119 111	100 105
116			.118			.093			113	116
120 135	.119	•137	.148 .167	-141	.126	.120 .138	.098	•012		120 135
155			.178			.149			.090	155
180 205	.194	.189	.190 .200	.173	.157	.164	.153	.172	.105 .148	180 205
225			.212			.171				225
240 250	.251	.239	.226 .235	•200	-174	•175 •174	•143	.073	132	240 250
255	.225	.236		.205	.177	.156	.098	064	134	255
260 265	.167	.153	.214 .151	.129	.099	.140 .069	037	130	128 131	260 265
270	.115	.079	.046	001	046	096	03/	130	126	270
275	.074	-008	055	110	141	143	150	131	131	275
280 285	013	109	118 147	147	144	145 148	154	164	127 120	280 285
290			138			150			126	290
300 315	103	127	136 138	145	143	153 162	159	171		300 315
335			146			142			118	325

ORIGINAL PAGE 5

TABLE 2.- Continued

THE TA					CP AT X/L					THET
DFG	0.10	0.50	0.30	0.4C	0.50	0.60	0.70	0.85	0.95	DEC
0	137	117	137	151	153	142	158	145	171	(
25			009			121			119	2:
45			098			106				45
60	135	155	160	150	135	126	125	143		60
70			157			157			115	70
75	146	149	146	157	150	140	145	139	115	79
60			147			145			098	80
85	100	159	147	146	145	136	139	126	109	8:
90	069	115	141	156	144	136			121	90
95	027	038	036	057	360	085	124	-•122	120	9:
100 105			.044			.037			125	100
110	.051	.082	-114	.126	.123	.104	.058	106	110	10
120	.146	-187	.156 .203	•211	.197	.144			122	110
135	• 1 +0	*101	.235	• 5 1 1	.141	-185	.163	.061		120
155			•254			-215				139
100	. 289	.288	.274	.272	.250	.234		24.5	•155 •276	155
205	. 2 74	. 2 00	- 192		.270	.255	.241	.265	.240	180 205
225			.309			.265			.243	553
240	.359	.354	.327	.315	.277	.273	.236	.150		240
256	•3/•	.,,,	.336	•317	*671	.270	30	.170	110	250
255	.303	• 332	•330	.313	•272	.260	.180	023	136	255
260		• • • • • • • • • • • • • • • • • • • •	.289	• • • • • • • • • • • • • • • • • • • •	••••	•555	*****	•063	140	260
265	.212	-201	.194	.187	-151	.170	.000	154	137	265
270	.136	.099	.056	.011	040	088	****	***	132	270
275	.077	.008	067	120	151	162	167	149	136	279
28C			133			163	••••	•••	135	280
205	025	126	162	153	159	100	171	172	128	28
290			154			166		••••	132	290
30C	125	15C	152	163	162	169	172	104		300
			151	•		175				315
315			:59			177			152	335

			AL PHA	24.93,	P. I = 22.	5. 300Y	ALONE			
THETA					CF AT X/L	•				THETA
DER	0.10	0.20	0.30	0.40	4.50	0.60	0.70	0.85	0.95	DEG
C	165	165	16A	179	175	158	178	176	191	o
25			130			180			177	25
45			127			149				45
60	1e1	165	165	155	142	141	146	154		60
70			162			152			130	70
75	171	160	157	160	153	149	145	146	113	75
PC			157			146			099	80
P 5	132	166	156	154	146	138	140	126	122	85
90	098	136	155	165	147	130			130	90
95	053	056	044	051	054	078	117	127	127	95
100			.053			.070			129	160
105	.04C	.398	.145	.169	.173	.154	.105	084	123	105
110			-202			.207			135	110
120	.175	.246	.273	.291	.280	.262	.241	.116		120
135			.323			.300				135
155			.354			.325			.229	155
100	.401	• 395	.384	.385	.357		.344	.369	.375	180
205			.411			.360			.342	205
225			.433			.376				225
240	.486	.481	.453	.443	.396	.385	.345	.241		240
250			.458			.301			075	250
255	.392	.433		.432	.386	.366	.278	.031	115	255
260			.301			.314			143	260
265	.266	.249	.249	.247	•212	.178	.047	142	161	265
270	.162	.122	.078	.027	026	075			151	270
275	.091	000	074	128	156	167	187	172	157	275
280			142			180			157	280
245	032	134	171	180	175	183	186	183	156	2 85
290			166			182			155	290
300	144	:5C	163	178	176	184	185	191		300
315			164			184				315
335			171			187			162	335

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Continued

(a) Continued

ALPHA = 4.60, PHI = 45.0, BODY ALONE

				.,,		000				
THETA					CP AT X/L=					THETA
DEC	0.10	0.20	0.30	0.4C	C.50	0.60	0.70	0.85	0.95	DEG
0	007	006	011	016	016	011	021	004	.005	0
25			009			019			037	25
45 60	011	011	010 013	016	016	019 021	025	054		45 60
70			619	.010	•010	025	023	•034	088	76
75	001	014	022	027	028	030	042	075	081	75
80 85	.020	.001	024 016	031	044	037	- 070	098	071	8C
90	.031	.019	.004	012	G34	052 058	070	046	067 062	65 90
95	-039	.033	-026	.012	005	031	089	072	069	95
100 105	04.3	643	.033	030	010	008	034		052	100
110	.048	.042	.035 .035	.030	.019	.004	034	086	04e 053	1C5 110
120	.349	-042	.037	.035	•025	.018	001	05€		120
135 155			-040			.022				135
180	.052	.043	.041 .044	.038	.032	•C56	.027	.039	012 .047	155 180
205			.044		•	.027	***		.021	205
225	0.47	453	.045	0.10		.028				225
240 250	-087	.057	•053 •065	.043	.035	.028 850.	-013	023	072	240 250
255	-113	-084	1007	.057	.041	.027	010	161	071	255
560	• • •		.086			.026			073	560
265 270	.116 .109	.097 .084	.090 .069	.074 .048	.048 .018	.019 023	057	109	077 083	265 270
275	.094	.059	.027	605	034	059	092	105	080	275
580			015			063			060	2 80
285 290	-054	007	035 040	046	050	057 050	068	046	039	285
300	.001	032	034	03€	035	020	033	028	030	290 300
315			028			024				315
335			616			020			002	335
			ALPHA =	9.62,	PHI = 45.0,	8004	ALONE			

THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L+ 0.50	0.50	C.70	0.85	0.95	THETA DEG
0 25	043	036	029 026	033	036	031 035	040	613	.006 043	0 25
45			023			033			•••	45
60	040	027	028	030	031	032	637	C71		60
7G 75	046	054	039 049	057	068	043 070	069	126	107 101	70 75
80		•••	067		***************************************	096	•••		094	80
95	029	064	081	082	080	081	106	107	107	65
90 95	013 .001	045 014	074 026	095 051	068 066	045 091	105	102	090 070	90 95
100			-006			033			093	160
105	.027	.027	.028	.020	.010	003	041	108	090	105
11C	.052	.057	.041 .054	.045	.038	.016 .033	.013	053	091	110 120
135			-063			.045				135
155	200	.0°7	•06A	004	046	.054	040	.074	.007	155
18C 205	.069	.5-7	.074 .061	.064	.065	.065	.060	.074	.072	186 205
225			.091			.070				225
240 250	.165	.140	.107	-091	.084	.076 .082	-054	.015	105	240 250
255	.193	.101	.129	.120	.104	.085	.034	OA1	104	255
260			.156			.084			100	260
26 5 2 70	.179	.173	.148 .097	.128 .064	.164 .028	.066 650	633	131	100 096	265 270
275	•156 •127	.136 .083	.023	029	063	100	148	129	093	275
290			042			130			101	280
285 290	•05A	031	GAO 101	113	171	129	131	142	107 105	285
300						110				290
	029	092	099	107	098	119 094	088	065	103	290 300
315	029	092	099 087	107	098	094	085	065		300 315
315 335	029	092	099	107	098	094	085	065	.011	300

ORIGINAL PAGE IS TABLE 2.- Continued OF POOR QUALITY

10	Co	-		~4
123	l CD	nr	ווח ו	മപ

			ALPHA =	14.51,	PHI = 45.0	. 800¥	ALONE			
THETA					CP AT X/L=					THETA
DFG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0	086	120	127	131	129	120	132	116	115	0
25			036			087			105	25
45 60	067	042	036 038	046	052	652 059	069	104		45 50
70			105			075			107	70
75 80	081	095	114 104	119	119	107 109	110	126	113 104	75 80
85	079	098	102	106	102	100	109	122	098	85
90	061	111	103	106	102	100			095	90
95 100	041	071	084 035	104	107	139 050	104	111	110 122	95 100
105	005	002	.008	.013	.010	004	037	114	114	105
110 120	044	05.8	.035	.07C	043	.025	030	039	116	110
135	.044	.058	.068 .093	.070	•062	•05e •078	.039	034		120 135
155			-110			.094			.035	155
180 205	.136	.129	•129 •147	.116	.106	.117	.105	.124	.136 .136	180 205
225			.169			.126			****	225
240	.269	.225	-200	.168	-145	-142	-116	.072		240
250 255	.294	.277	.235	.208	.181	.154 .162	-099	044	105 125	250 255
260			.263			.162			117	560
265 270	.260 .216	.243 .184	.235 .149	.202 .101	.171 .053	.132 007	.011	141	115 109	265 270
275	.174	.109	.041	027	070	109	1e1	134	112	275
2#0			045			147			112	280
285 290	-071	040	092 119	131	142	143 138	149	151	104 117	2 # 5 2 9 0
300	047	119	131	133	130	134	136	137	•••	300
315 335			122 120			126 128			098	315 335
THETA			AL PHA	- 19.62,	PHI = 45.0					
DEG	0.10						/ ALONE			THETA
٥	130	0.20	0.30	0.40	CP AT X/L		0.70	0.85	0.95	THETA DEG
25		0.20 142	0.30	0.40	CP AT X/L	0.63		0.85 136	0.95 142	976 C
45 60			137 150		CP AT X/L	0.60 130 159	0.70			0 C C 25
76	110	142	137 150 072	142	CP AT X/L4 0.50 141	0.63	0.70		142	976 C
75	110	142	137 150 072 073 127	142 079	CP AT X/L- C-50 141 081	0.63 130 159 159 090 101	0.70 144 118	136 165	142 154	DEG 25 45 60 70
ėο	110 111	142	137 150 072 073 127 130	142	CP AT X/L4 0.50 141	0.63 130 159 159 090 101 118	0.70	136	142 154 154 146	00G 25 45 60 70 75
80 85		142	137 150 072 073 127	142 079	CP AT X/L- C-50 141 081	0.63 130 159 159 090 101	0.70 144 118	136 165	142 154 154 146 124 109	DEG C 25 45 60 70 75 80 85
85 90	111 126 112	142 064 127 125 128	137 150 072 073 127 130 130 119	142 079 129 115 114	CP AT X/L4 C.50 141 081 123 109 105	0.63 130 159 090 101 116 108 102	0.70 144 116 124 110	136 165 137 129	142 154 154 146 124 109	DEG C 25 45 60 70 75 80 85 90
85 90 95	111 126	142 064 127 125	137 150 072 073 127 130 130 119 118	142 079 129 115	CP AT x/L- 0-50141081123109	0.63 130 159 090 101 118 108 102 099	0.70 144 118 124	136 165 137	142 154 154 146 124 109	DEG C 25 45 60 70 75 80 85
85 90 95 100 105	111 126 112	142 064 127 125 128	137 150 072 073 127 130 130 119 118 061	142 079 129 115 114	CP AT X/L4 C.50 141 081 123 109 105	0.63 130 159 090 101 118 102 099 102 050	0.70 144 116 124 110	136 165 137 129	142 154 146 124 109 109 123 127	00 G 25 45 60 70 75 80 85 90 95 100
85 90 95 100 105 110	111 126 112 089	142 064 127 125 12e 120	137 150 072 073 127 130 119 118 061 002	142 079 129 115 114 126	CP AT X/L- C-50141081123109105113	0.63 130 159 090 101 118 108 102 099 102 050	0.70144118124110103024	136 165 137 129 114	142 154 154 146 124 109 109 123 127	00 G C 25 45 60 70 75 80 95 90 95
85 90 95 100 105 110 120	111 126 112 089	142 064 127 125 126 120	137 150 072 073 127 130 130 119 118 0161 002 .037 .038	142 079 129 115 114 126	CP AT X/L0 0.50 141 081 123 109 105 113	0.63 130 159 090 101 118 102 099 102 099 105 0.008	0.70 144 116 124 110 103	136 165 137 129 114	142 154 146 124 109 109 123 127 120	00 G 25 45 60 70 75 80 85 90 95 100 105 110 120
85 90 95 100 105 11C 120 135	111 126 112 089 040	142 064 127 125 120 029	137 150 072 073 127 130 119 118 061 002 .037 .098 .127	142079129115114126 .015	CP AT X/L- C-50141081123109105113019	0.63 130 159 090 101 118 102 099 102 099	0.701441181241101C3024 .C73	136 165 137 129 114 122 016	142 154 154 146 124 109 109 123 127 120	00 G 25 45 60 70 75 80 95 90 95 100 120 120 135 135
85 90 95 100 105 11C 120 135 155	111 126 112 089	142 064 127 125 12e 120	137 150 072 073 127 130 119 118 061 002 037 038 127 154	142 079 129 115 114 126	CP AT X/L- C-50141081123109105113	0.63 130 159 090 101 118 108 102 099 102 050 .008 .046 .089 .122	0.70144118124110103024	136 165 137 129 114	142 154 146 124 109 109 123 127 120	00 G 25 45 60 70 75 80 85 90 95 100 105 110 120
85 90 95 100 105 11C 120 135 155 160 205	111 126 112 089 040 .033	142 064 127 125 120 029 .064	137 150 072 073 127 130 119 110 110 061 002 .037 .098 .127 .154 .165	142079129115114126 .015 .102	CP AT X/L- C-50141081123109105113019097	0.63 130 159 090 101 108 102 099 102 050 .008 .046 .089 .122 .148	0.70144118124110163024 .673	136 165 137 129 114 122 016	142 154 154 146 124 109 123 127 120 122	00 G 25 45 60 75 80 95 90 95 110 120 135 155 180 225
85 90 95 100 105 116 120 135 155 160 205 225 240	111 126 112 089 040	142 064 127 125 120 029	137 150 072 073 127 130 119 118 061 002 .037 .098 .127 .154 .185 .216	142079129115114126 .015	CP AT X/L- C-50141081123109105113019	0.63 -130 -159 -159 -090 -101 -118 -102 -099 -102 -008 0046 089 -122 -148	0.701441181241101C3024 .C73	136 165 137 129 114 122 016	142 154 154 146 124 109 123 127 120 122	00 G 25 45 60 70 75 80 85 90 105 110 120 135 155 160 205 225 246
85 90 95 100 105 11C 120 135 155 160 205 225 240 250 255	111 126 112 089 040 .033	142 064 127 125 120 029 .064	137 150 072 073 127 130 119 118 061 002 .037 .098 .127 .154 .185 .216 .251 .297	142079129115114126 .015 .102	CP AT X/L- C-50141081123109105113019097	0.63 -130 -159 -090 -101 -118 -108 -102 -099 -102 -008 .046 .089 -122 .148 .185 .203 .226 .258	0.70144118124110163024 .673	136 165 137 129 114 122 016	142 154 146 124 109 109 127 127 127 127 120 122	00 G 25 45 60 75 80 85 90 95 100 120 135 155 180 205 225 240 250
85 90 95 100 115 120 135 155 140 205 225 240 250 255 250	111126112089040 .033 .197	142064127125126120029 .064 .194 .339	137 150 072 073 127 130 119 118 061 002 .037 .098 .127 .154 .185 .216 .251 .297	142079129115114126015102194266323	CP AT X/L- C-50141081123109105113019097168231277	0.63 -130 -159 -159 -090 -1118 -102 -099 -102 -008 046 089 122 148 185 -226 -258	0.70144118124110103024 .673 .166 .194 .181	136165137129114122016 .16P .146	142 154 154 146 124 109 123 127 120 122 .074 .199 .219	00 G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 260
85 90 95 100 105 11C 120 135 155 160 205 225 240 250 255	111126112089040 .033 .197	142 064 127 125 120 029 .064 .194	137 150 072 073 127 130 119 118 061 002 .037 .098 .127 .154 .185 .216 .251 .297	142079129115114126 .015 .102	CP AT X/L- C-50141081123109105113019097168231277252085	0.63 -130 -159 -0159 -090 -1101 -1108 -102 -099 -102 -008 .046 .089 .122 .148 .185 .203 .226 .258 .258 .258	0.701441181241101C3024 .673 .166	13e16513712911412201e .16F .146 .009121	142 154 154 146 124 109 127 127 120 122 .074 .199 .219	00 G 25 45 60 75 80 85 90 95 100 120 135 155 180 225 240 255 260 265 270
85 90 95 100 115 120 135 155 160 205 225 240 250 255 260 265 270 275	111126112089040 .033 .197 .393 .411	142064127125120029 .064 .194 .339 .398	137 150 072 073 127 130 119 118 061 002 .037 .098 .127 .154 .185 .216 .251 .297 .344	142079129115114126 .015 .102 .194 .266 .323	CP AT X/LC C.50141081123109105113 .019 .097 .168 .231 .277	0.63 -130 -159 -109 -101 -118 -102 -099 -102 -008 046 089 122 148 185 -226 -246 -258 -216 -258 -216 -200 -105	0.70144118124110103024 .673 .166 .194 .181	136165137129114122016 .16P .146 .009	142 154 154 146 124 109 123 127 120 122 .074 .199 .219	00 G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 260 265 2770 275
85 90 95 100 110 120 135 155 160 205 225 240 255 269 270 275 275	111126112089040 .033 .197 .393 .411	142064127125120029 .064 .194 .339 .398 .333	137150072073127130130118018001002037098127154185216251297344373323201045	142079129115114126 .015 .102 .194 .266 .323 .297 .151014	CP AT X/LC C.50141081123109105113 .019 .097 .168 .231 .277 .252 .085070	0.6313015910111011102099102050069122148185203246258258214020105	0.70144118124110163024 .673 .166 .194 .181	13e16513712911412201e .16F .146 .009121	142 154 154 146 124 109 127 127 120 122 .074 .199 .219	00 G 25 45 60 75 80 85 90 95 110 120 135 155 180 225 240 255 260 265 270
85 90 95 100 105 11C 120 135 155 160 205 225 240 250 255 260 275 280 275 280 285	111126112089040 .033 .197 .393 .411 .391 .284 .225	142064127125120027 .064 .194 .339 .398 .333 .245 .146039	137150072073127130130119118061002037098127154185216297344373323000045100045	142079129115114120 .015 .102 .194 .260 .323 .297 .151014	CP AT X/L- C-50141081123109105113019097168231277252085070153	0.63 130 159 090 101 108 102 099 102 050 .046 .089 .122 .14R .185 .226 .246 .258 .214 .258 .258 .258 .258 .258 .2155 105 105 105 105 105 105 105 106 .256 .258	0.70144118124110103024 .073 .166 .194 .181 .068160163	136165137129114122016 .166 .166 .009121153166	142 154 154 146 124 109 123 127 120 122 .074 .199 .219	0 C C 25 45 60 70 75 80 85 90 100 120 135 155 180 205 225 240 255 270 275 280 285 290
85 90 100 105 11C 120 135 155 160 205 240 255 260 270 275 285	111126112089040 .033 .197 .393 .411 .391 .284	142064127125120029 .064 .194 .339 .398 .333 .245	137150072073127130130119118061002037 .098 .127 .154 .165 .251 .297 .344 .373 .323 .201 .060045100	142079129115114126 .015 .102 .194 .266 .323 .297 .151014	CP AT X/LC C.50141081123109105113 .019 .097 .168 .231 .277 .252 .085070	0.63 -130 -159 -0159 -090 -1101 -1108 -102 -099 -102 -008 .046 .089 -122 .148 .185 .233 .226 .258 .258 .258 .258 .258 .258 .258 .258	0.70144118124110103024 .673 .166 .194 .181 .068160	13e16513712911412201e .16P .146 .009121153	142 154 154 146 124 109 127 127 120 122 .074 .199 .219	00 G 25 45 60 75 80 85 90 95 100 120 135 155 180 225 240 255 260 265 270 275 280

ORIGINAL PAGE IN OF POOR QUALITY TABLE 2.- Continued

BODY ALONE

(a) Continued

ALPHA = 24.61, PHI = 45.0,

				C 11027	****		250.25			
THETA					CP AT X/L+					THETA
UE G	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
										_
.0	151	151	148	157	159	146	163	156	177	0
25 45			163 150			`71 175			159	25 45
60	156	100	103	123	161	173	173	169		60
70	****		129	••••	****	141	•••	•107	145	70
75	140	141	131	125	113	117	150	174	138	75
8 C			130			105			131	80
65	141	135	124	116	104	099	116	148	148	85
90	149	134	124	112	099	694			157	90
95	131	144	129	124	101	095	101	134	151	95
100	076	•••	073			041			159	100
105 110	075	046	002 .047	•022	.035	.029 .078	002	137	143	105
120	.018	.077	.115	.13e	-140	.132	.118	.613	159	110 120
135	••••	••••	.172	****	••••	.174	****	.013		135
155			.213			.207			.121	155
160	.266	.266	.258	.261	.240		.236	.262	.272	180
205			.361			.261			.314	205
225			.348			.290				225
240	.533	.464	.405	.384	.332	.323	•290	.236		240
250	640	530	.463		204	.355			010	250
255 260	.540	.528	.490	.456	.396	.371 .370	.279	.077	050 010	255 260
265	.452	.429	.418	.407	.354	.311	.140	087	125	265
270	.359	.312	.258	.208	.130	.056	•••	••••	144	270
275	.283	-186	.083	•002	059	094	150	182	162	275
280			040			157			164	280
285	.114	033	100	142	156	174	181	181	162	285
290			133			175			161	290
300	064	136	159	166	161	170	173	186		300
315 335			151 150			168			- 164	315
337			170			169			156	335
						9994	4 A ONE			
			AL PHA	• 4,42,	PHI = 67.5		7 ALONE			THETA
THETA					CP AT X/L=	1		0.85	0.05	THFTA
THETA DEG	C.10	0.20	ALPHA 0.30	• 4.42,			7 ALONE 0.70	0.85	0.95	THFTA DEG
UEE			0.30	0.40	CP AT X/L= 0.50	0.60	0.70			DEG
0 - 0	0.10 .001	0.20 000	0.30 005		CP AT X/L=	1		0.85	0.95 .008 ~.042	
UEE			0.30	0.40	CP AT X/L= 0.50	0.60	0.70	.001	.00e	DEG 0 25 45
0 E G 2 5			0.30 005 002 002 002	0.40	CP AT X/L= 0.50	0.60 007 014 014	0.70		.00e 042	0 25 45 60
0 C 25 45 60 70	.001	000	0.30 005 002 002 002 004	0.40 008 007	CP AT X/L= 0.50 010	0.60 007 014 014 015 017	0.70 018 022	.001 063	.00e 042 096	0 25 45 60 70
0 C 25 45 60 70 75	.061	000	0.30 005 002 002 004 004	0.40	CP AT X/L= 0.50 010	0.60 007 014 014 015 017	0.70 018	.001	.008 042 096 081	DEG 0 25 45 60 70 75
0EG C 25 45 60 70 75	.061 .061 .007	000 .002 .003	0.30 005 002 002 004 004 005	0.40 008 007 012	CP AT X/L= 0.50010011015	0.60 007 014 015 017 020 023	0.70 018 022 037	063 080	.00e 042 096 081 071	DEG 0 25 45 60 70 75 80
0 C 25 45 60 70 75 80 85	.061 .001 .007	000 .002 .003	0.30 005 002 002 004 004 005	0.40 006 007 012	CP AT X/L= 0.50010011015020	0.60 007 014 014 015 017	0.70 018 022	.001 063	.008 042 096 081	DEG 0 25 45 60 70 75
0 C 25 45 60 70 75 80 85 90	.001 .001 .007 .018	000 .002 .003	0.30 005 002 002 004 004 005	0.40 008 007 012	CP AT X/L= 0.50010011015	0.60 007 014 015 017 020 023 029	0.70 018 022 037	063 080	042 042 096 081 071 061	DEG 0 25 45 60 70 75 80 85
0 C 25 45 60 70 75 80 85	.061 .001 .007	000 .002 .003 .011	0.30 005 002 002 004 004 005 .001	0.40 008 007 012 012 003	CP AT X/L= 0.50010011015020017	0.60007014015017020023029032023	0.70 018 022 037 053	.001 063 080 067 067	042042096081071061055061	0E6 0 25 45 60 70 75 80 85 90 95
0 C 25 45 60 70 75 80 85 90 95 100 105	.001 .001 .007 .018	000 .002 .003 .011	0.30005002002004004005001 .011 .020 .023	0.40 008 007 012 012 003	CP AT X/L= 0.50010011015020017	0.60 007 014 015 017 020 023 029 032 023	0.70 018 022 037 053	063 080 067	042042096081071061055061047	0 25 45 60 70 75 80 85 90 93 100 105
0EG C 25 45 60 70 75 80 85 90 95 100 105	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004004005 .001 .011 .020 .023	0.40 008 007 012 012 003 .007	CP AT X/L= 0.50010011015020017006	0.60 007 014 015 017 020 023 023 023 023 023	0.70 018 022 037 053 068 039	.001 063 080 067 067	042042096081071061055061	0
0 C 25 45 60 70 75 80 85 90 95 100 120 120	.001 .001 .007 .018 .024	000 .002 .003 .011 .021	0.30005002002004005001 .011 .020 .023 .023 .023	0.40 008 007 012 012 003 .007	CP AT X/L= 0.50010011015020017006	0.60 007 014 015 017 023 023 023 023 013 006	0.70 018 022 037 053	.001 063 080 067 067	042042096081071061055061047	0E6 0 25 45 60 70 75 80 85 90 95 100 105 110
0EG C 25 45 60 70 75 80 85 90 915 100 105 110 120	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004004005001 .021 .023 .023 .023	0.40 008 007 012 012 003 .007	CP AT X/L= 0.50010011015020017006	0.60 007 014 015 017 020 023 023 023 003 0013 006 001	0.70 018 022 037 053 068 039	.001 063 080 067 067	.008042096081071055061047043045	0
0EG C 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004004005 .001 .011 .020 .023 .023 .023 .023	0.40 008 007 012 012 003 .007 .015	CP AT X/L= 0.50010011015020017006 .005	0.60 007 014 015 017 023 023 023 023 013 006	0.70 018 022 037 053 068 039	.001 063 080 067 067	042042096081071061055061047	0E6 0 25 45 60 70 75 80 85 90 95 100 105 110
0 E G 2 5 4 5 6 0 7 0 7 5 8 0 8 5 9 0 1 0 5 1 1 0 1 2 0 1 3 5 1 5 5 1 8 0	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004004005001 .021 .023 .023 .023	0.40 008 007 012 012 003 .007	CP AT X/L= 0.50010011015020017006	0.60 007 014 015 017 020 023 023 023 003 0013 006 001	0.70018022037053068039012	.001063080067067075069	042042096081071061055061047043045	0E6 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 160 205
0EG C 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004004005 .001 .011 .020 .023 .023 .023 .023 .023 .023 .023	0.40 008 007 012 012 003 .007 .015	CP AT X/L= 0.50010011015020017006 .005 .011	0.60 007 014 015 017 020 023 023 006 001 .004 .007	0.70018022037053068039012	.001063060067067075069	042042096081071061055061047043045	0E6 0 25 45 60 70 75 80 95 90 93 100 120 120 135 155 180 205 225
0EG C 25 45 60 70 75 80 85 90 105 110 120 135 156 205 725 240	.001 .001 .007 .018 .024 .028	000 .002 .003 .011 .021 .027	0.30005002002004005 .001 .011 .020 .023 .023 .023 .023 .023 .025 .026	0.40 008 007 012 012 003 .007 .015	CP AT X/L= 0.50010011015020017006 .005	0.60007014015017020023023023013006001 .004 .007 .011	0.70018022037053068039012	.001063080067067075069	042042096081071061047043043045	0E6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 170 205 225 225
0EG C 25 45 60 70 75 80 85 90 95 100 120 135 156 180 205 259 240	.001 .001 .007 .018 .024 .026 .031 .032 .034	000 .002 .003 .011 .021 .027 .029 .028	0.30005002002004004005 .001 .011 .020 .023 .023 .023 .023 .023 .023 .023	0.40 008 007 012 012 003 .007 .015 .020	CP AT X/L= 0.50010011015020017006 .005 .011 .016	0.60007014015017020023023003001001001001001001001	0.70018022037053068039012 .014	.001063060067067075069026	.008042096081071061055061047043045027 .033 .015	0E6 0 25 45 60 70 75 80 85 90 100 110 120 135 155 180 205 225 240 250
0EG C 25 45 60 75 80 85 90 105 110 120 135 155 180 205 725 240 255	.001 .001 .007 .018 .024 .026 .031 .032	000 .002 .003 .011 .021 .027 .029	0.30005002002004005001011023023023023023024023025026031046	0.40 008 007 012 012 003 .007 .015	CP AT X/L= 0.50010011015020017006 .005 .011	0.60 007 014 015 017 020 023 023 006 001 .004 .007 .011	0.70018022037053068039012	.001063060067067075069	042042096081071061055061043045027033015	0E6 0 25 45 60 70 75 80 90 93 100 120 135 120 135 170 225 240 250 255
0 E G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 250 250	.001 .001 .007 .018 .024 .028 .031 .032 .034	000 .002 .003 .011 .021 .027 .029 .028 .027	0.30005002002004005 .001 .011 .020 .023 .023 .023 .023 .023 .023 .023	0.40008007012012013 .007 .015 .020 .022	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027	0.60007014014015017020023023003001001004007011012012013013	0.70018022037053068039012 .014 .001018	.001063080067067075069026026	042042042096081071061047043045027033015	0E6 0 25 45 60 70 75 80 85 90 100 103 110 120 135 155 1P0 205 240 250 250 255
0EG C 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205 225 240 250 260 265	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .114	000 .002 .003 .011 .021 .027 .029 .028	0.30005002002004005001011023023023023023024023025026031046	0.40 008 007 012 012 003 .007 .015 .020	CP AT X/L= 0.50010011015020017006 .005 .011 .016	0.60 007 014 015 017 020 023 023 006 001 .004 .007 .011	0.70018022037053068039012 .014	.001063060067067075069026	042042096081071061055061043045027033015	0E6 0 25 45 60 70 75 80 90 93 100 120 120 125 120 225 240 255 240 255 265 270
0 E G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 250 250	.001 .001 .007 .018 .024 .028 .031 .032 .034	000 .002 .003 .011 .021 .027 .029 .028 .027	0.30005002002004005 .001 .011 .020 .023 .023 .023 .023 .023 .025 .026 .031 .046 .079 .097	0.40008007012012003 .007 .015 .020 .022 .024 .041	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027	0.60007014014015017020023023023011004001001001012012013018023025	0.70018022037053068039012 .014 .001018	.001063080067067075069026026	042042042096081071061055061043045027033015	0E6 0 25 45 60 70 75 80 85 90 100 103 110 120 135 195 205 240 250 250 250 260 270 275
0EG C 25 45 60 77 75 80 85 90 95 100 105 110 120 135 180 205 225 240 250 275 260 275 280	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .114 .129 .128 .117	000 .002 .003 .011 .021 .027 .029 .028 .027 .040 .075 .106 .104 .085	0.30005002002004004005 .001 .020 .023 .023 .023 .023 .024 .023 .025 .026 .031 .046 .079 .093 .059	0.40008007012012003 .007 .015 .020 .022 .024 .041 .076 .071 .028	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027 .050 .042 .000	0.60007014015017020023023013006001 .007 .011 .012 .012 .013 .015 .018 .023 .006025037	0.70018022037053068039012 .014 .001018046072	.001063060067067069026026029079	.008042096081071061055061047043045027033015	0E6 0 25 45 60 70 75 80 85 90 100 105 110 135 155 120 225 240 250 250 260 270 275 280
0EG C 25 45 60 70 75 80 85 90 915 100 120 135 155 180 255 260 255 260 275 280 285	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .114 .129	000 .002 .003 .011 .021 .027 .029 .028 .027	0.30005002002004006005 .001 .020 .023 .023 .023 .023 .023 .024 .023 .025 .026 .031 .040 .079 .097 .093 .059 .018	0.40008007012012003 .007 .015 .020 .022 .024 .041 .076	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027 .050 .042	0.60007014015017020023023001001001001001001001001002013003001001001001001001001001001001001001001001001003003	0.70018022037053068039012 .014 .001018046	.001063067067067069026026029	042042096081071061055061047043045027033015	0E6 0 25 45 60 70 75 80 90 93 100 110 120 120 120 255 240 255 265 270 275 280 285
0 E G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 240 275 280 285 290	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .119 .129 .126 .117	000 .002 .003 .011 .021 .027 .029 .028 .027 .040 .075 .106 .104 .085	0.30005002002004005011020023023023023023023023023025026031040079079079019	0.40008007012012003 .007 .015 .020 .022 .024 .041 .076 .071 .028025	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027 .050 .042 .000030	0.60007014015017020023023023011004001001001001001002002003003003003003003003003003003	0.70018022037053068039012 .014 .001018046072051	.001063060067067075069026026079062046	.008042096081071061055061047043045027033015	0E6 0 25 45 60 70 75 80 85 90 100 101 120 135 195 205 225 240 250 255 270 275 280 290
0EG C 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 725 240 250 275 260 275 280 285 290 300	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .114 .129 .128 .117	000 .002 .003 .011 .021 .027 .029 .028 .027 .040 .075 .106 .104 .085	0.30005002002004004005 .001 .020 .023 .023 .023 .023 .024 .023 .025 .026 .031 .040 .079 .093 .059 .010007	0.40008007012012003 .007 .015 .020 .022 .024 .041 .076 .071 .028	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027 .050 .042 .000	0.60007014015017020023023001006001 .007 .011 .012 .012 .013 .015 .018 .023 .006027037037037	0.70018022037053068039012 .014 .001018046072	.001063060067067069026026029079	042042096081071061055061047043045027033015	0E6 0 25 45 60 70 75 80 90 93 100 110 120 120 120 255 240 255 265 270 275 280 285
0 E G 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 240 275 280 285 290	.001 .001 .007 .018 .024 .026 .031 .032 .034 .076 .119 .129 .126 .117	000 .002 .003 .011 .021 .027 .029 .028 .027 .040 .075 .106 .104 .085	0.30005002002004005011020023023023023023023023023025026031040079079079019	0.40008007012012003 .007 .015 .020 .022 .024 .041 .076 .071 .028025	CP AT X/L= 0.50010011015020017006 .005 .011 .016 .019 .027 .050 .042 .000030	0.60007014015017020023023023011004001001001001001002002003003003003003003003003003003	0.70018022037053068039012 .014 .001018046072051	.001063060067067075069026026079062046	042042096081071061055061047043045027033015	0E6 0 25 45 60 70 75 80 85 90 100 105 1120 135 155 1205 2250 2250 2250 2250 2250 2260 2270 2275 2280 2280 2280 2280 2280 2280

ORIGINAL PAGE 13 OF POOR QUALITY

TABLE 2.- Continued

			ALPHA =	9.44,	PHI = 67.5,	BODY	ALONE			
THETA Deg	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25	033	033	029 020	029	032	024 030	035	012	002 059	0 25
45			014			026				45
60	019	008	010	013	019	024	032	664		60
70			011			023			127	70
75	021	010	012	016	020	027	044	116	129	75
80			017			035			118	80
85	018	017	022	028	030	039	070	104	113	85
90	014	015	024	038	044	045		072	103	90
95	009	007	013	031	045	061 045	077	073	076 060	95 100
100 105	.002	.007	002	604	013	029	061	081	057	105
110	*****		.012	004	-1013	016		••••	068	110
120	.015	•020	.019	.010	.004	003	019	081	****	120
135	****	*****	.023			.008				135
155			.024			.016			030	155
180	.042	.037	.029	.021	.021		.022	.035	.046	160
205			.032			.023			.051	205
225			.040			.027				225
240	.141	.095	.059	.044	.039	.034	•020	•002		240
250			.090			.042			092	250
255	• 505	-167		.090	•066	.050	.008	069	101	255
260	215	305	.145	147	***	.064	- 017	_ 116	089	260
265 220	.215	-205	.167	.147	.112	.077	017	115	076 063	265 270
270 275	.205 .184	.191 .151	.149 .091	.126	.089 .010	.041 029	094	107	058	275
28C	•104	•131	.024	.047	*010	070	044		061	280
285	.120	.037	019	054	069	086	102	080	034	285
290	•120	•031	048	0,-	- •007	092	****		.010	290
300	.024	044	073	083	083	081	063	025		300
315	•••	••••	065	••••		048	*****			315
335			055			038			.025	335
					out - 43 5	200	A4 0NF			
			ALPHA •	14.42,	PHI = 67.5,	, BODY	ALONE			THETA
TH∈TA D≟G	C-10	0.20			PHI = 67.5, CP AT X/L= C.50	, 80D¥	ALONE 0.70	0.85	0.95	THFTA DEG
THETA DEG	C.10	0.20	ALPHA • C.30	0.40	CP AT X/L=		0.70			DEG
	C.10 073	0•20 -• 094			CP AT X/L=	0.60		0.85 055	051	DEG
0 ± 6 25			0.30 085 052	0.40	CP AT X/L= C.50	0.60 062 066	0.70			0 E G
0 ± 6 0 25 45	073	094	0.30 085 052 030	0.40	CP AT X/L= C.50 071	0.60 062 066 056	0.70 071	055	051	0 6 0 25 45
0 d G 25 45 60			C.30 085 C52 030 021	0.40	CP AT X/L= C.50	0.60 062 066 056 045	0.70		051 099	0 25 45 60
0 d G 25 45 60 70	073 033	094	C.30 085 C52 030 021 017	0.40 074 027	CP AT X/L= C.50 071 033	0.60 062 066 056 045 041	0.70 071 059	055 109	051 099	0 25 45 60 70
0 ± G 0 25 45 60 70 75	073	094	0.30 085 052 030 021 017	0.40	CP AT X/L= C.50 071	0.60 062 066 056 045 041	0.70 071	055	051 099 132 134	0 25 45 60 70 75
0 25 45 60 70 75 80	073 033 037	094 014 016	0.30 085 052 030 021 017 022	0.40 074 027 026	CP AT X/L= C.50 071 033 029	0.60 062 066 056 045 041 041	0.70 071 059 069	055 109 135	051 099	0 25 45 60 70
0 25 45 60 70 75 80 85	073 033 037 042	094 014 016	0.30 085 052 030 021 017 022 035	0.40 074 027 026 045	CP AT X/L= C.50 071 033	0.60 062 066 056 045 041	0.70 071 059	055 109	051 099 132 134 129	0 25 45 60 70 75 80
0 25 45 60 70 75 80	073 033 037 042 044	094 014 016 034 045	0.30 085 052 030 021 017 022	0.40 074 027 026	CP AT X/L= C.50 071 033 029 054	0.60 062 066 056 045 041 053 059 052	0.70 071 059 069	055 109 135	051 099 132 134 129 134 107	DEG 0 25 45 60 70 75 80 85 90
0 ± G 0 25 45 60 70 75 80 85	073 033 037 042	094 014 016	C.30085652030021017022035038	0.40 074 027 026 045 049 068	CP AT X/L- C.50 071 033 029 054 051	0.60062066056045041041053059052	0.70 071 059 069 083	055 109 135 126 093	051 099 132 134 129 134 107 082	0 E G
0 ± G 0 25 45 60 70 75 80 85 90	073 033 037 042 044	094 014 016 034 045	C.30085652030021017022035038047059055	0.40 074 027 026 045 049	CP AT X/L- C.50 071 033 029 054 051	0.60 062 066 056 041 053 059 059 052 064 084	0.70 071 059 069 083	055 109 135 120	051 099 132 134 129 134 107 082 089	0 FG 0 25 45 60 70 75 80 85 90 95
0 ± G 0 25 45 60 70 75 80 85 90 95 10C 105	073 033 037 042 044 041	094 014 016 034 045 052 039	G.30085052030021017022035038047059055038	0.40 074 027 026 045 049 068	CP AT X/L- C.50 071 033 029 054 051 005 042	0.60 062 066 056 045 041 053 059 052 064 084 056	0.70 071 059 069 083 076	055 109 135 126 093 100	051 099 132 134 129 134 107 082	0 FG 0 25 45 60 70 75 80 85 90 95 100 105 110
0 ± G 0 25 45 60 70 75 80 85 90 95 100 105 110	073 033 037 042 044 041	094 014 016 034 045 052	C.30085052030021017022035038047059055038024005	0.40 074 027 026 045 049 068	CP AT X/L= C.50 071 033 029 054 051 005	0.60062066056045041053059052064084056035	0.70 071 059 069 083 076	055 109 135 126 093	051 099 132 134 129 134 107 082 089	0 FG
0 ± G 0 25 49 60 70 75 80 85 90 95 100 105 110 120 135	073 033 037 042 044 041	094 014 016 034 045 052 039	C.30085052030021017022035038047055038024005	0.40 074 027 026 045 049 068	CP AT X/L- C.50 071 033 029 054 051 005 042	0.60062066056045041053059052064086035	0.70 071 059 069 083 076	055 109 135 126 093 100	051 099 132 134 129 134 107 082 089 090	0 FG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135
0 ± G 0 25 45 60 70 75 80 95 100 105 110 120 135 195	073033037042044041033011	094 014 016 034 052 039 010	C.30085052030021017022035038047059055038047059	0.40 074 027 026 045 049 068 037	CP AT X/L- C.50 071 033 029 054 051 005 042 006	0.60062066056045041053059052064084056035	0.70 071 059 069 083 076 084 026	055 109 135 120 093 100 092	051 099 132 134 129 134 107 082 089 090	0 FG 0 25 45 60 70 75 80 95 100 105 110 120 135
0 ± G 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180	073 033 037 042 044 041	094 014 016 034 045 052 039	C.30085052030021017022035038047059055038024005 .012	0.40 074 027 026 045 049 068	CP AT X/L- C.50 071 033 029 054 051 005 042	0.60062066056045041053059052064084056035013 .004	0.70 071 059 069 083 076	055 109 135 126 093 100	051 099 132 134 129 134 107 082 089 090 097	0 FG 0 25 45 60 70 75 80 85 90 105 110 120 135 155
0 ± G 0 25 49 60 70 75 80 85 90 95 100 110 120 135 155 180 205	073033037042044041033011	094 014 016 034 052 039 010	C.30085C52030021017022035038047055038024005 .012 .024 .042	0.40 074 027 026 045 049 068 037	CP AT X/L- C.50 071 033 029 054 051 005 042 006	0.60062066056045041053059052064035013 .004 .019	0.70 071 059 069 083 076 084 026	055 109 135 120 093 100 092	051 099 132 134 129 134 107 082 089 090	0 FG 0 25 45 60 75 80 85 90 95 100 105 110 120 135 159 180 205
0 ± G 0 25 45 60 70 75 80 95 105 110 120 135 185 180 205 225	073033037042044041033011	094 014 016 049 052 039 010	C.30085052030021017022035038047059055038047059055038024005	0.40 074 027 026 045 049 068 037 002	CP AT X/L- C.50 071 033 029 054 051 005 042 006	0.60062066076045041053052064084035013 .004 .019	0.70 071 059 069 083 076 084 026	055109135120093100092	051 099 132 134 129 134 107 082 089 090 097	0 FG 0 25 45 60 75 80 95 100 120 120 135 180 225
0 ± G 0 25 45 60 70 75 80 85 90 95 100 120 135 180 205 240	073033037042044041033011	094 014 016 034 052 039 010	C.30085052030021017022035038047059055038024005 .012 .024 .042 .058 .082	0.40 074 027 026 045 049 068 037	CP AT X/L- C.50 071 033 029 054 051 005 042 006	0.60062066056045041053059052064086035013 .004 .019	0.70 071 059 069 083 076 084 026	055 109 135 120 093 100 092	051 099 132 134 129 134 107 082 089 090 097	0 FG 0 25 45 60 75 80 85 90 95 100 105 110 120 135 159 180 205
0 ± G 0 25 49 60 75 80 85 90 95 100 120 135 159 180 205 225 240 250	073033037042044041033011 .052	094014016034045052039010 .042	C.30085052030021017022035038047059055038047059055038024005	0.40 074 027 026 049 068 037 002	CP AT X/L- C.50 071 033 029 054 051 005 042 006	0.60062066076045041053052064084035013 .004 .019	0.70 071 059 069 083 076 084 026	055109135120093100092	051 099 132 134 129 134 107 082 089 097	0 FG 0 25 45 60 75 80 95 100 120 135 155 180 205 225 240 255
0 ± G 0 25 45 60 70 75 80 85 90 95 100 120 135 180 205 240	073033037042044041033011	094 014 016 049 052 039 010	C.30085052030021017022035038047059055038024005 .012 .024 .042 .058 .082	0.40 074 027 026 045 049 068 037 002	CP AT X/L- C.50071033029054051065042006	0.60062066056045041053059052064085013 .004 .019	0.70 071 059 069 083 076 084 026	055109135120093100092 .048 .038032	051 099 132 134 129 134 107 082 089 097 097	0 FG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 255
0 ± G 0 25 45 60 75 80 95 105 110 120 135 180 205 225 240 255	073033037042044041033011 .052	094014016034045052039010 .042	C.30085052030021017022035038047059055038024005025026025027027027028	0.40 074 027 026 049 068 037 002 .032	CP AT X/L- C.50071033029054051065042006	0.60062066056041053059052064035013019039049056135013	0.70 071 059 069 083 076 084 026	055109135126093100092 .048	051 099 132 134 129 134 107 082 090 097 097	0 FG 0 25 45 60 75 80 85 90 95 100 120 135 150 225 240 250 255 260 265
0 ± G 0 25 45 60 75 80 95 10C 105 110 120 135 155 180 205 225 240 255 260 270	073033037042044041033011 .052 .230 .314	094014016034045052039010042158257298275	G.30085052030021017022035038047055038024005024005 .012 .024 .042 .058 .082 .121 .172	0.40 074 027 026 049 068 037 002 .032 .090 .160	CP AT X/L- C.50071033029054051005042006 .027 .074 .130 .196 .154	0.60062066076041053059052064086035013 .004 .019	0.70071059069083076084026031 .050 .055	055109135120093100092 .048 .038032099	051 099 132 134 129 134 107 082 089 097 097	0 FG 0 25 45 60 75 80 95 100 105 110 120 135 155 180 205 225 240 255 260 265 270
0 ± G 0 25 45 60 70 75 80 85 90 100 100 120 135 180 205 240 250 250 250 250 250 270 275	073033037042044041033011 .052 .230 .314	094014016045052039010 .042 .158 .257	G.30085052030021017022035038047059059059059059059012 .024 .042 .058 .082 .121 .172 .276 .242 .155	0.40 074 027 026 049 068 037 002 .032	CP AT X/L- C.50071033029054051065042006 .027 .074 .130 .196	0.60062066076045041053059055064086035013 .004 .019 .039 .049 .065 .130 .134 .097004	0.70 071 059 069 083 076 084 026	055109135120093100092 .048 .038032	051 099 132 134 129 134 107 082 089 097 097 061 097 097 099	0 FG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 255 260 265 2770 275
0 ± G 0 25 45 60 70 75 80 90 95 100 120 135 180 205 225 240 250 255 260 275 276 275 280	073033037042044041033011 .052 .230 .314 .326 .306 .274	094014016034045052039010 .042 .158 .257 .298 .275 .217	C.30085052030021017022035038047055038024055038024058024058024058024058024058024058024058024058024058025012058025012058025012058082015058082015058082095095095095095095095095095095095095096	0.40 074 027 026 049 068 037 002 .032 .090 .160	CP AT X/L- C.50 071 033029054051065042006 .027 .074 .130 .196 .154 .042	0.60062066056045041053059052064035013019039049056135013044056135013	0.70071059069083076084026031 .050 .055 .036079	055109135126093100092 .048 .038032099	051 099 132 134 129 134 107 089 090 097 097 097 067 061 097 067 067 067 069 097	0 FG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 259 260 275 280
0 ± G 0 25 45 60 75 80 95 100 105 110 120 135 155 180 205 225 240 255 260 275 270 275 280 285 270 275 280 287 287 287 287 287 287 287 287	073033037042044041033011 .052 .230 .314	094014016034045052039010042158257298275	C.30085052030021017022035038047055038024005024005012024058082121172251276242155060001	0.40 074 027 026 049 068 037 002 .032 .090 .160	CP AT X/L- C.50071033029054051005042006 .027 .074 .130 .196 .154	0.60062066056045041053059052064035013 .004 .019 .039 .049 .065105 .130 .194063068	0.70071059069083076084026031 .050 .055	055109135120093100092 .048 .038032099	051 099 132 134 129 082 089 097 097 067 081 097 097 089 097	0 FG 0 25 45 60 75 80 95 100 105 110 120 135 155 180 225 240 255 260 265 270 275 280
0 ± G 0 25 45 60 70 75 80 85 90 100 100 120 135 180 205 240 250 250 250 250 250 275 270 275 280 275 280 275 275 280 280 280 280 280 280 280 280	073033037042044041033011 .052 .230 .314 .326 .306 .274	094014016034052039010 .042 .158 .257 .298 .275 .217	C.30085052030021017022035038047059055038024005012024024024024025024025024025024025026027026027027027028029	0.40 074 027 026 049 068 037 002 .032 .090 .160 .233 .197 .088	CP AT X/L- C.50071033029054051005042006 .027 .074 .130 .196 .154 .042068	0.60062066076045041053059055064084035013 .004 .019 .039 .049 .065 .130 .105101003008	0.70071059069083076084026 .031 .050 .055 .036079110	055109135120093100092 .048 .038032099118100	051 099 132 134 129 134 107 089 090 097 097 097 067 061 097 067 067 067 069 097	0 FG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 255 260 275 280 285
0 ± G 0 25 45 60 70 75 80 90 95 100 105 110 120 135 180 205 225 240 255 260 275 270 275 280 285 285 280 285 285 285 286 287 287 287 287 287 287 287 287	073033037042044041033011 .052 .230 .314 .326 .306 .274	094014016034045052039010 .042 .158 .257 .298 .275 .217	C.30085052030021017022035038047055038024055038024055012025012025012025012026012026012027058027058028029012041082	0.40 074 027 026 049 068 037 002 .032 .090 .160	CP AT X/L- C.50 071 033029054051065042006 .027 .074 .130 .196 .154 .042	0.60062066056045041053059052064035013019039049056131019	0.70071059069083076084026031 .050 .055 .036079	055109135126093100092 .048 .038032099	051 099 132 134 129 082 089 097 097 067 061 097 089 097 067 089	0EG 0 25 45 60 75 80 95 100 105 110 120 135 155 180 225 240 255 260 275 280 285 290 300 315
0 ± G 0 25 45 60 70 75 80 85 90 100 100 120 135 180 205 240 250 250 250 250 250 275 270 275 280 275 280 275 275 280 280 280 280 280 280 280 280	073033037042044041033011 .052 .230 .314 .326 .306 .274	094014016034052039010 .042 .158 .257 .298 .275 .217	C.30085052030021017022035038047059055038024005012024024024024025024025024025024025026027026027027027028029	0.40 074 027 026 049 068 037 002 .032 .090 .160 .233 .197 .088	CP AT X/L- C.50071033029054051005042006 .027 .074 .130 .196 .154 .042068	0.60062066076045041053059055064084035013 .004 .019 .039 .049 .065 .130 .105101003008	0.70071059069083076084026 .031 .050 .055 .036079110	055109135120093100092 .048 .038032099118100	051 099 132 134 129 082 089 097 097 067 061 097 089 097 067 089	0EG 0 25 45 60 70 75 80 85 90 105 110 135 150 205 225 240 250 270 275 280 285 290 300

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Continued

(a) Continued

ALPHA = 19.41, PHI = 67.5, BODY ALONE

			MET THE		**** O 1 6 7 5 7 5	900	, we come			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEC
0	11	116	114	112	114	105	119	110	127	0
25 45			105 102			103			159	25
60	043	020	055	105	103	100 098	103	137		45 60
70			032			107			135	70
75 80	053	023	035 063	048	049	069 068	119	134	127 121	75 80
85	068	077	074	064	059	063	091	132	125	85
90	076	079	068	058	054	057			114	90
95 100	062	079	070 084	062	058	060	081	122	109 128	95 100
105	083	096	088	077	074	080	099	123	119	105
110	- 053	0.44	065		015	052	***		132	110
120 135	053	046	028 .003	016	015	020 .007	029	095		120 135
155			.025			.031			C27	155
180 205	.069	.063	.056	.054	.046	047	.052	.072	.085	180
225			.087 .128			.067			.144	205 225
240	.333	.244	.189	•152	.122	.116	.096	.092		240
250 255	.442	.375	.263	.251	.206	.151	114	034	006	250
260	• 442	•317	.366	•671	•200	.180 .217	.116	.024	026 050	255 260
265	.451	.418	.395	.347	.300	.249	-106	057	066	265
270 275	.419	.382	.343 .223	.291	•236	.170	- 064	- 109	084	270
280	.373	.303	.099	.143	.084	.031 050	056	108	078 069	275 280
285	.242	.100	.020	033	061	083	108	103	062	285
290 300	.037	042	030 081	102	110	099 118	124	097	057	290
315	•1/21	-1046	113	-1102	-4110	132	154	047		300 315
335			130			141			073	335
			ALPHA •	24.42,	PHI = 67.5,	5 00 Y	ALONE			
			ALT 17A	244429		0.00				
THETA Deg	0.10	0.20	3.30	0.46	CP AT X/L=	0.60	0.70	0.85	0.95	THETA DEG
0 25	137	125	124 123	133	145	133 151	145	135	138 170	0 25
45			120			129			-1110	45
60	039	110	127	125	118	124	120	149		50
70 75	053	055	087 068	094	130	120 120	120	135	156 146	70 75
ėó	•023	- 4033	085	••••	****	129	****		133	80
85 90	115 115	109	089 086	071 068	066 061	088	136	147	144 143	85 90
95	118	106 104	075	069	062	067	101	147	136	95
100			082			085			143	100
105 110	128	110	100 083	094	084	085 052	100	149	136 142	105 110
120	090	066	036	018	009	011	018	090	•••	120
135			.007			.023			- 013	135
155 130	.093	.094	.041 .088	.088	.078	.053	.085	.108	013 .124	155 160
205			.129		••••	.105			.210	205
225	.449	.334	.183 .260	226	.188	.138 .178	.155	.161		225 240
240 250	. 4.14	• 334	.353	.229	• * 0 6	.229	•177	•101	•072	250
255	.582	.497		.360	.297	.267	•193	.096	.046	255
760 265	.587	.544	.48Z .512	.479	.410	.318	.193	00.	.015 006	260 265
270	.542	.494	.439	.400	.322	.255			040	270
								- 003		
275	.481	.391	•289 127	•506	•131	.072	026	083	046	275
275 280			.137	• 206	•131 -•049	.072 031				2 8 6
275 280 285 290	.311	•138	.137 .043 015	.206 014	049	.072 031 074 094	101	101	040 042	286 285 290
275 280 285 290 300			.137 .043 015 075	• 206		.072 031 074 094 117			040 042 049	2 8 G 2 8 5 2 9 O 3 O O
275 280 285 290	.311	•138	.137 .043 015	.206 014	049	.072 031 074 094	101	101	040 042 049	2 P G 2 8 5 2 9 0

TABLE 2.- Continued

ORIGINAL PAGE IS OF POOR QUALITY

(a) Continued

ALPHA = -5.34, PHI = 90.0, BODY ALONE

				- 7 . 3 . ,	7112 - VOIO)	0001	WEOME			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
_										
0	.019	.016	-012	.009	.005	•007	006	.016	.014	0
25 45			.009 .005			003			.003	25
60	.054	.015	.003	000	004	005 008	013	035		45
70	••••	•••	.014		***************************************	010	013	039	025	60 70
75	.103	.059	.029	.008	001	012	032	071	019	75
60			.050			009		••••	01B	80
P 5	•135	.109	.084	.056	.030	.001	052	054	010	85
90	•141	.124	.103	.078	.050	.016			003	90
95	.136	.111	.086	.058	•033	.006	051	054	025	95
100 105	.106	.064	.058 .033	014	001	007	023		017	100
îĭć	•100	.004	.017	.014	.001	008 007	031	07C	020 027	105 110
120	.057	.022	.008	.004	001	005	014	635	027	120
135			.007			001		****		135
155			.010			.001			.000	155
180	•071	.018	.015	.010	.005		.004	.011	.019	100
205			.017			.001			037	205
225 240	030	022	.018		004	.001				225
250	•050	•022	.019 .020	•013	•006	601 004	016	068	- 022	240
255	.025	.024	•020	.012	•004	007	034	066	033 059	250 255
260	****	***	.019	****	****	011		•000	057	260
265	.027	.028	.022	.013	.001	013	050	053	038	265
270	.026	.029	.024	.014	.003	314			021	270
275	•027	.029	•020	•012	•001	011	048	054	042	275
280 285	022	033	-018	010	000	007			062	280
285 290	•023	.023	.016 .017	.010	.003	006	033	072	063	285
300	.019	.023	.016	.012	.005	004 001	015	064	062	290 300
315			.016		••••	.001		-•004		315
335			.015			.001			031	335
			_							
			ALPHA .	69,	PHI • 90.0,	8004	ALONE			
THETA					CP AT X/L=					:HETA
DFG	C.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
• •	****	*****	*****	••••	••••		••••	****	••••	0
0	.024	.022	.016	.011	•006	.009	003	.011	.010	0
25			.015			001			020	25
45			.013			002				45
60 70	•030	.018	.010	.008	•002	005	013	050	- 041	60
75	.052	.032	.012 .017	.007	001	008 011	034	081	041 040	70 75
eó	.072	•032	.024	•007	- 1001	012	-1034	-0001	033	éó
85	.069	. 053	.040	.024	.007	014	056	051	023	85
90	•072	.062	.049	.033	•01	011			008	90
95	.068	.9:5	.041	.024	•009	012	055	051	022	95
100			.029			012	_ 034		039	100
105 110	.053	•032	.020 .015	.010	•001	(10 007	034	000	037	105 110
120	.031	.017	.015 .015	.010	•003	007	015	050	045	150
135	••••		.016		1003	.000	****			135
155			.017			•002			022	155
180	.027	.021	.019	.013	.007		.006	.010	.013	180
205			.017			.003			017	205
225	A35	633	.015		^^=	.003	- 011	- 643		225
240 250	.035	• 055	.014 .017	.010	-005	.001 002	011	047	046	240 250
255	.056	.036		.011	•004	005	031	080	042	255
590			.029			008			039	260
265	.069	.057	.043	.027	.O.	007	~.054	051	023	265
270	.071	.061	.049	.035	.015	006			004	270
275	•069	.057	.041	.025	•011	007	054	052	021	275
280		A33	.027	000	003	006	_ 031	- 697	037	280
2 8 5 290	.055	.032	.018	.008	•002		031	082	940	285
			-014							
300	.033	.022	.014 .013	.008	.003	003	011	044	043	290 300
300 315	.033	.022	.014 .013 .014	.008	.003		011	044	043	300 315
	.033	•022	.013	.008	.003	003 000	011	044	020	300
315	.033	.022	.013 .014	.008	.003	003 000 .002	011	044		300 315

ORIGINAL PAGE IS OF POOR QUALITY

.028

TABLE 2.- Continued

(a) Continued

BODY ALONE

ALPHA = 4.32, PHI = 90.0,

			ALPHA -	7.329	LUI - 40.0)	0001	WEOME			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
_										
0	.016	.011	.005	.004	000	.003	010	•011	.017	0
25 45			.007 .008			006 006			038	25 45
60	.015	.015	.007	.004	001	007	018	073		60
70			.008	-		010			068	70
75	.017	.017	.010	.002	005	013	037	075	070	75
80			.010			015			063	80
85 90	.021 .022	.021	.014	.004	007 007	019 019	051	057	048	85 90
95	.021	•024 •022	.015 .015	.003	006	016	050	057	029 042	95
100			.013			015			068	100
105	.018	.018	.012	.003	003	012	038	074	062	105
110	•••		.011	•••		009			067	110
120 135	.016	.015	•012 •012	•006	000	007 005	020	073		120 135
155			.010			003			040	155
180	.017	.011	.009	.007	.001	••••	.000	.010	.017	180
205			.006			004			.007	205
225			.004			006				225
240 250	.054	.015	.006	.001	002	008 009	016	031	029	240 250
255	.105	•057	.018	.014	•002	009	032	066	019	255
260	****	••••	.057	••••	****	005			015	560
265	.132	.104	.090	.063	.035	.009	050	053	010	265
270	.137	-114	•103	.082	.054	.019			001	270
275	.132	.104	.085	.058	.032	•005 -•007	051	052	005	275
280 285	.104	.050	•051 •026	.008	002	012	035	063	011 016	280 285
290	• • • • • • • • • • • • • • • • • • • •	*****	.011	••••	••••	012	*****	1003	023	290
300	.051	.012	000	003	006	009	017	028		300
315			000			006				315
335			•002			005			.005	335
			ALPHA .	9.32,	PHI - 90.0,	BODY	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
										•
0	003	010	013 007	015	017	009 018	021	•000	.006 056	0 25
25 45			003			019			•050	45
60	005	•002	.000	005	013	020	032	093		60
70			.002			021			096	70
75	006	.004	.003	003	012	022	048	091	098 094	75 80
80 85	007	.004	.002 .003	003	010	021	048	075	079	85
90	007	.004	.002	003	010	019			059	90
95	007	-003	.003	004	010	020	046	075	070	95
100		•••	.004			022	04.0		097	100 105
105 110	006	•005	.004	004	011	022 021	048	- , G90	088 095	110
120	005	.062	.002	006	013	020	034	093	****	120
135			002			018			_	135
155			009			015		- 001	058	155
180	005	008	013 019	017	017	010	611	001	.00B	180 205
205 225			021			023			***	225
240	.091	.033	006	020	020	024	029	021		240
250			850.			020		. 050	014	250
255	.175	-117	.098	.029	•006	012 .007	038	-,050	010 005	255 260
260 265	.220	.197	.150	.122	.080	.044	036	057	001	265
270	.228	.215	.174	.153	.117	.072			.002	270
275	.221	.201	.148	.116	.079	.040	038	056	.001	275
280	130		.095	A 2 1	003	.006 013	041	048	001 005	280 285
2 P S 2 P G	.178	.111	.052 .021	.021	.002	055	041	-1046	008	290
300	.089	.025	010	022	023	024	029	019		300
315			022			022			028	315

TABLE 2.- Continued ORIGINAL PAGE IS
OF POOR QUALITY

			ALPHA .	14.32.	PHI = 90.0.	8004	ALONE			
THETA					CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
_0	025	049	048	047	049	039	047	624	014	0
25 45			043 032			045 073			084	25 45
60	025	021	021	024	032	042	054	117		60
70 75	- 022	- 000	013	^16	022	040			114	70
80	023	008	009 008	015	023	037 030	062	109	117 106	75 80
85	022	002	004	010	015	026	056	091	097	85
90 95	022	001	004	009	014	024			088	90
100	022	002	005 007	010	016	026 030	053	092	094 112	95 100
105	023	009	010	014	024	037	063	108	108	105
110 120	026	022	013 021	024	- 033	040	- 058	- 330	115	110
135	026	022	031	024	032	042 042	055	118		120 135
155			044			040			085	155
180 205	030	046	046 043	050	051	047	036	024	010	100 205
225			022			045			.031	225
240	.142	•059	.017	011	024	031	040	020		240
250 255	.268	.179	.071	.067	.034	009 .012	023	032	.009 .007	250 255
260	•	•••	.173	•••	•034	.045	-•023	036	.007	260
265	.333	.289	.246	.195	.148	•102	•002	041	.008	265
270 275	.344 .333	.314 .294	.281 .245	.239 .188	.201 .148	.146 .097	.001	042	.009 .010	270 275
280			.170	••••	••••	.045	1001	****	.010	280
285 290	.271	•171	.108	.057	.032	.010	027	034	.009	285
300	.141	.048	.062 .010	014	026	010 032	042	021	•012	290 300
315		•	024		4010	046	****	****		315
335			043			051			.030	335
			AI DHA	= 19.31.	PMT = 90.0	. RODY	· ALONE			
			ALPHA	- 19.31,	PHI = 90.0		ALONE			
TMFTA Deg	0.10	0.20	ALPHA 0.30	- 19.31, 0.40	PHI = 90.0 CP AT X/L= 2.50		* ALONE 0.70	0.85	0.95	THETA DEG
DEG			0.30	0.40	CP AT X/L= 2.50	0.60	0.70			DEG
DEG O	0.10 041	0.20 065	0.30		CP AT X/L=	0.60		0.85 047	038	0 E G
DEG		065	0.30	0.40	CP AT X/L= 2.50	0.60 060 085 096	0.70	047		DEG
0 25 45 60			0.30 065 083 095 062	0.40	CP AT X/L= 2.50	0.60 060 085 096 083	0.70		038 114	0EG 0 25 45 60
DEG 0 25 45 60 70	041	064	0.30 065 083 095 062 037	0.40 063 062	CP AT X/L= 2.50 067 068	0.60 060 085 096 083	0.70 067 099	047 150	038 114	DEG 0 25 45 60 70
OFG 0 25 45 60 70 75 80	041 064 047	065 064 033	0.30 065 083 095 062 037 029 028	0.40 063 062 034	CP AT X/L= 2.50067068040	0.60 060 085 096 083 061 053	0.70 067 099 074	047 150 142	038 114 135 135 124	0 25 45 60 70 75 80
0 25 45 60 70 75 80 85	041 064 047 037	065 064 033 010	0.30 065 083 095 062 037 029 028	0.40 663 062 034 031	CP AT X/L= 2.50067068040034	0.60 060 085 096 083 061 053 047	0.70 067 099	047 150	038 114 135 135 124 134	0 25 45 60 70 75 80 85
OFG 0 25 45 60 70 75 80	041 064 047	065 064 033	0.30 065 083 095 062 037 029 028	0.40 063 062 034	CP AT X/L= 2.50067068040	0.60 060 085 096 083 061 053	0.70 067 099 074	047 150 142	038 114 135 135 124	0 25 45 60 70 75 80
0 25 45 60 70 75 80 85 90 95 100	041 064 047 037 035 039	065 064 033 010 006 008	0.30 065 083 095 062 037 029 028 023 014 022	0.40 063 062 034 031 023 028	CP AT X/L= 2.50067068040034030033	0.60 060 085 096 083 061 053 047 046 043	0.70 067 099 074 073 071	047 150 142 106 105	038 114 135 135 124 135 126 138	0EG 0 25 45 60 70 75 80 85 90
0 25 45 60 70 75 80 85 90 95 100 105	041 064 047 037 035	065 064 033 010 006	0.30065083095062037029028023014022024024	0.40 063 062 034 031	067 067 068 040 034	0.60 060 085 096 083 061 053 047 043 043	0.70 067 099 074 073	047 150 142 106	038 114 135 135 124 135 126	0 EG 0 25 45 60 70 75 80 85 90 95
0 25 45 60 70 75 80 85 90 95 100 105 110 120	041 064 047 037 035 039	065 064 033 010 006 008	0.30065083095062037029028023014022024028035	0.40 063 062 034 031 023 028	CP AT X/L= 2.50067068040034030033	0.60 060 085 096 083 061 053 047 046 043 045 049	0.70 067 099 074 073 071	047 150 142 106 105	038 114 135 135 124 135 126 138	0 EG 0 25 45 60 70 75 80 85 90 100 105 110
0 25 45 60 70 75 80 85 90 95 110 120 135	041 064 047 037 035 039	065 064 033 010 006 008	0.30065083095062029028023014022024027029059059	0.40 063 062 034 031 023 028	CP AT X/L= 2.50067068040034030033	0.60 060 085 096 083 047 043 043 043 045 049 057	0.70 067 099 074 073 071	047 150 142 106 105	038 114 135 135 124 135 126 138	0 EG 0 25 45 60 70 75 80 85 90 95 100 105 110 120
0 25 45 60 70 75 80 85 90 95 100 120 125 155	041 064 047 037 035 039 050	065 064 033 010 006 008 028 063	0.30065083095062037029028023014022024027028035059086	0.40 063 062 034 023 028 031	CP AT X/L= 2.50067068040034030033039067	0.60 060 085 096 083 061 053 047 046 043 045 049	0.70 067 099 074 073 071 072	047150142106105140150	038 114 135 135 124 135 126 138 126 139	0 EG 0 25 45 60 70 75 80 85 90 95 100 120 120 135
0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205	041 064 047 037 035 039	065 064 033 010 006 008	0.30065083095062037029028023014022024028059059086062062	0.40 063 062 034 031 023 028	CP AT X/L= 2.50067068040034030033	0.60 060 085 096 083 047 043 043 043 045 049 057 081 096 077	0.70 067 099 074 073 071	047 150 142 106 105	038 114 135 135 124 135 126 138	0 EG 0 25 45 60 75 80 85 90 95 100 120 135 155 180 205
0 25 45 60 70 75 80 85 90 95 110 120 135 160 205 225	041 064 047 037 035 039 050 066	065 064 033 010 006 008 028 063	0.30065083095062037029028023014022024025059059066062064010	0.40 063 062 034 023 028 031 059	CP AT X/L=	0.60060085096083061053047043043045049057081096077	0.70 067 099 074 073 071 072 098	047150142106105140150047	038 114 135 135 124 135 126 138 126 139	0 EG 0 25 45 60 75 85 90 95 100 120 120 135 180 205 225
0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205	041 064 047 037 035 039 050	065 064 033 010 006 008 028 063	0.30065083095062037029028023014022024028059059086062062	0.40 063 062 034 023 028 031	CP AT X/L= 2.50067068040034030033039067	0.60 060 085 096 083 047 043 043 043 045 049 057 081 096 077	0.70 067 099 074 073 071 072	047150142106105140150	038 114 135 135 124 135 126 138 126 139	0 EG 0 25 45 60 75 80 85 90 95 100 120 135 155 180 205
0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 225 240 255	041 064 047 037 035 039 050 066	065 064 033 010 006 008 028 063	0.30065083095062037029028023014022024035059066066064010049122	0.40 063 062 034 023 028 031 059	CP AT X/L=	0.60060085096083047043043045049057081096077	0.70 067 099 074 073 071 072 098	047150142106105140150047	038114 135135124135126138126139 118032 .036	0 EG 0 25 45 60 75 80 85 90 105 110 120 135 155 180 225 240 255
0 25 45 60 70 75 80 85 90 95 1100 120 135 155 240 250 255 260	041064047037035039050066045	065064033010006008028063059 .102	0.30065083095062029028023014022024028035059086062044010049122	0.40063062034031023028031059066 .015	CP AT X/L=	0.60060085096083061053047046043045049057081096077	0.70067099074073071072098058024 .009	047150142106105140150047 .006	038114 135135124135126138126139 118032 .036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255
0 25 45 60 70 75 80 85 90 95 110 120 135 155 240 255 260 265 270	041064047037035039050066	065 064 033 010 006 008 028 063 059	0.30065083095062037029028023014022024025059059086066066060060049122260358	0.40063062034023028031059066 .015 .122 .293	CP AT X/L=	0.60060085096083047043043043045049057081096077	0.70 067 099 074 073 071 072 098 058	047150142106105140150047 .006 .006	038114 135135124135126138126139 118032 .036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 285 240 255 260 255 260 270
0 25 45 60 70 75 76 80 85 90 95 100 105 110 120 135 155 240 250 255 265 270 275	041064047037035039050066045	065064033010006008028063059 .102 .260	0.30065083095062037029028023014022024035059086086062049122260358406358	0.40063062034031023028031059066 .015 .122	CP AT X/L=	0.60060085096083047043043045049057081096077	0.70067099074073071072098058024 .009	047150142106105140150047 .006	038114 135125124135126138126139 118032 .036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 240 270 275
0 C C C C C C C C C C C C C C C C C C C	041064047037035039050066045 .204 .315	065064033010006008028063059 .102 .260 .403 .438 .414	0.30065083095062029028024024024025035096086044010049122260358406358258	0.40063062034023028031059066 .015 .122 .293 .353 .287	CP AT X/L=	0.60060085096083047043043043045049057081096077	0.70067099074073071072098058024 .009	047150142106105140150047 .006 .006	038114135135124135126139126139118032 .036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 285 240 255 260 255 260 270
0 C C C C C C C C C C C C C C C C C C C	041064047037035039050066045 .204 .375 .463 .477 .463	065064033010006008028063059102260403438414254	0.30065083095062037029028023014022024035059086086086044010 .049 .122 .260 .358 .406 .358 .258 .176 .113	0.40063062034023028031059066 .015 .122 .293 .353 .287 .110	CP AT X/L=	0.60060085096083061053047043045049057081096077081096077	0.70067099074073071072098058024 .009 .057 .056	047150142106105140150047 .006 .006 .000001	038114 135125124135126138126139 118032 .036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 270 275 280 285
0 C C C C C C C C C C C C C C C C C C C	041064047037035039050066045 .204 .375 .463 .477 .463	065064033010006008028063059 .102 .260 .403 .438 .414	0.30065083095062029028024024025035096086086044010049122260358406358176113039	0.40063062034023028031059066 .015 .122 .293 .353 .287	CP AT X/L=	0.60060085096083047043043049057088096077048038014072096077096077	0.70067099074073071072098058024 .009 .057	047150142106105140150047 .006 .006 .000	038114135135124135126139126139118032036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 270 275 280 285 290 300
0 C C C C C C C C C C C C C C C C C C C	041064047037035039050066045 .204 .375 .463 .477 .463	065064033010006008028063059102260403438414254	0.30065083095062037029028023014022024035059086086086044010 .049 .122 .260 .358 .406 .358 .258 .176 .113	0.40063062034023028031059066 .015 .122 .293 .353 .287 .110	CP AT X/L=	0.60060085096083061053047043045049057081096077081096077	0.70067099074073071072098058024 .009 .057 .056	047150142106105140150047 .006 .006 .000001	038114135135124135126139126139118032036	0 EG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 240 250 255 270 275 280 285

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Continued

(a) Concluded

			ALPHA = 24.30,		PHI = 90.0), BODY	ALONE			
THETA					CP AT X/L.					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DFG
0	049	064	061	 056	061	053	058	040	028	0
25			089			083			115	25
45			111			101				45
60	108	099	093	105	114	120	121	157		60
70			071			090			-,148	70
75	094	088	065	068	066	077	096	148	146	75
60			070			071			133	60
85	028	034	073	068	067	070	096	136	142	85
90	017	024	~.050	054	059	071			143	90
95	023	036	068	061	061	069	094	139	142	95
100			065			069			146	100
105	092	088	062	062	062	071	094	150	135	105
110			068			081			151	110
120	104	094	085	092	108	119	122	159		120
135			115			102				135
155			095			079			123	155
180	059	061	063	064	066		053	039	026	100
205			037			040			.059	205
225			.007			024				225
240	.268	.147	.080	.048	.020	.010	002	.040		240
250			•167			.057			.110	250
255	.485	. 345		.184	.124	.097	•047	.055	.117	255
260			.339			.162			.116	260
265	.597	.530	.465	.408	.321	.268	.123	.055	.115	265
270	.616	.574	•527	.488	.414	.354			.115	270
275	•601	•543	.469	.403	.326	.263	•125	.054	.119	275
280	_		.343			.163			.119	280
285	•500	. 344	.241	.175	.125	.099	.044	.051	.118	285
290			.163			.057			.116	290
300	.278	.137	.073	.046	.023	.014	002	.039		300
315			.011			020				315
335			031			045			.058	335

TABLE 2.- Continued

(b) Body-tail configuration

ALPHA = -5.00, PHI . O.O, BODY/TAIL/NO DFFLECTIONS

THETA					CP AT X/L+					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DFG
0							•029	.045	.083	0
25 45									.074	25
66							.020	034		45 60
70									107	70
75							012	110	092	75
80									064	80
85							083	096	080	85
90									082	.0
95 100							107	107	074	95
105							058	069	091 086	100 105
110							070	-1004	088	110
120							035	042		120
135										135
155									.016	155
180							010	•001	.039	180
205 225									-014	205
240							032	041		225
250							032	041	098	240 2 5 0
255							066	672	093	255
260									085	260
265							099	104	076	265
270									063	270
275							088	105	068	275
280									068	280
285 290							011	115	083	285
300							-016	032	101	290 300
315							****			315
335									.072	235
THETA		ALPH	4A = .01,	PHI =		DY/TAIL/NI	D DEFLECTIO	DNS		THFTA
THETA DEG	0.10	ALPH 0.20	4A = .01, 0.30	PHI =	0.0, 80 CP AT X/L=	DY/TAIL/NI 0.60	0.70	O • 8 5	0.95	THETA DEG
O S G	0.10				CP AT X/L=				.041	DFG O
DE G 0 25	0.10				CP AT X/L=		0.70	0.85		DFG 0 25
0E G 0 25 45	0.10				CP AT X/L=		0.70 005	0.85 .0i1	.041	DEG 0 25 45
0 25 45 60	0.10				CP AT X/L=		0.70	0.85	.041 .029	0 25 45 60
DEG 0 25 45 60 70	0.10				CP AT X/L=		0.70 005 013	0.85 .0:1	.041 .029	0FG 25 45 60 70
DEG 0 25 45 60 70 75	0.10				CP AT X/L=		0.70 005	0.85 .0i1	.041 .029 373 056	DEG 0 25 45 60 70 75
DEG 0 25 45 60 70	0.10				CP AT X/L=		0.70 005 013	0.85 .0:1	.041 .029	0FG 25 45 60 70
DEG 0 25 45 60 70 75 80 85	0.10				CP AT X/L=		0.70 005 013 034	0.85 .011 048 085	.041 .029 073 056 043 024	DFG 0 25 45 60 70 75 80 85
DEG 0 25 45 60 70 75 80 85 90	0.10				CP AT X/L=		0.70 005 013 034	0.85 .011 048 085	.041 .029 073 056 043 024 005	DFG 0 25 45 60 70 75 80 85 90
DE G 0 25 45 60 70 75 80 85 90	0.10				CP AT X/L=		0.70 005 013 034 056 055	0.85 .0i1 048 085 054	073 056 043 024 005 034	0 25 45 60 70 75 80 85 90 95 100
DEG 0 25 45 60 70 75 80 85 90 95 100	0.10				CP AT X/L=		0.70 005 013 034 056	0.85 .011 048 085	.041 .029 073 056 043 024 005 034 051	0 25 45 60 70 75 80 85 90 95 100 105
DEG 0 25 45 60 70 75 80 85 90 95 100	0.10				CP AT X/L=		0.70 005 013 034 056 055 033	0.85 .0:1 048 085 054 055	073 056 043 024 005 034	0 25 45 60 70 75 80 85 95 100 105 110
DE G 0 25 45 60 70 75 80 85 90 95 100 105 110	0.10				CP AT X/L=		0.70 005 013 034 056 055	0.85 .0i1 048 085 054	.041 .029 073 056 043 024 005 034 051	0 25 45 60 70 75 80 85 90 100 105 110 120
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120	0.10				CP AT X/L=		0.70 005 013 034 056 055 033	0.85 .0:1 048 085 054 055	.041 .029 073 056 043 024 005 034 051 062	066 025 45 60 70 75 80 85 90 95 100 105 110
DEG 0 25 45 60 70 75 80 85 90 95 100 120 125	0.10				CP AT X/L=		0.70 005 013 034 056 055 033 012	0.85 .0:1 048 085 054 055 088	.041 .029 073 056 043 024 005 034 051	0 25 45 60 70 75 80 85 90 100 105 110 120
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205	0.10				CP AT X/L=		0.70 005 013 034 056 055 033	0.85 .0:1 048 085 054 055	.041 .029 073 056 043 024 005 034 051 062 091	0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205
DEG 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225	0.10				CP AT X/L=		0.70 005 013 034 056 055 033 012	0.85 .0:1 048 085 054 095 068 045	.041 .029 073 056 043 024 005 034 051 062 091	0 25 45 60 70 75 80 85 90 95 110 120 125 185 225
DEG 0 25 45 60 70 75 80 85 90 105 110 135 110 205 225 240	0.10				CP AT X/L=		0.70 005 013 034 056 055 033 012	0.85 .0:1 048 085 054 055 068	.041 .029 073 056 043 024 005 034 051 062 091	0 25 45 60 70 75 80 85 90 105 110 120 135 150 205 255 240
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205 225 240 250	0.10				CP AT X/L=		0.70005013034056055033012 .008	0.85 .0:1 048 085 054 055 068 045	.041 .029 073 056 003 005 005 005 062 091	0 25 45 60 70 75 80 85 90 105 110 120 135 150 205 225 240 250
DEG 0 25 45 60 70 75 80 85 90 91 100 120 135 180 205 225 240 250 295	0.10				CP AT X/L=		0.70 005 013 034 056 055 033 012	0.85 .0:1 048 085 054 095 068 045	.041 .029 073 056 043 005 034 051 062 091	0 25 45 60 70 75 80 85 90 95 100 120 135 150 205 225 240 255
DEG 0 25 45 60 70 75 80 85 90 105 110 135 110 205 225 240 250 255 260	0.10				CP AT X/L=		0.70005013034056055033012 .008013032	0.85 .0:1 048 085 054 055 088 045 .011	.041 .029 073 056 043 024 005 034 051 062 091	0 25 45 60 70 75 80 85 90 105 110 120 135 155 255 250 255 260
DEG 0 25 45 60 70 75 80 85 90 95 100 105 1120 135 155 180 205 225 240 256 256 260 265	0.10				CP AT X/L=		0.70005013034056055033012 .008	0.85 .0:1 048 085 054 055 068 045	.041 .029 073 056 005 005 005 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 100 120 120 120 255 240 255 265
DEG 0 25 45 60 70 75 80 85 90 105 110 135 110 205 225 240 250 255 260	0.10				CP AT X/L=		0.70005013034056055033012 .008013032	0.85 .0:1 048 085 054 055 088 045 .011	.041 .029 073 056 043 024 005 034 051 062 091	0 25 45 60 70 75 80 85 90 105 110 120 135 155 255 250 255 260
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 135 135 180 205 225 240 256 256 276 275 280	0.10				CP AT X/L=		0.70005013034056055033012 .008013032056	0.85 .0i1048085054055068045 .011049076050	.041 .029 073 056 005 005 005 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 100 120 135 155 180 205 225 240 250 260 270 275 280
DEG 0 25 45 60 70 75 80 85 90 95 100 125 110 120 135 155 180 205 225 240 255 260 265	0.10				CP AT X/L=		0.70005013034056055033012 .008013032056	0.85 .0:1 048 085 054 055 068 045 .011 049 076	.041 .029 073 056 043 005 034 051 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 105 110 120 135 155 280 205 270 275 280 285
DEG 0 25 45 60 70 75 80 85 90 105 110 120 135 180 205 225 240 250 255 260 255 275 280 285	0.10				CP AT X/L=		0.70005013034056055033012 .008013032056056031	0.85 .0:1048085054095088045 .011049076090052	.041 .029 073 056 005 005 005 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 100 120 135 180 205 225 240 255 270 265 270 285 290
DEG 0 25 45 60 70 75 80 65 90 95 100 105 110 135 155 180 205 225 240 250 275 260 275 280 285 290 300	0.10				CP AT X/L=		0.70005013034056055033012 .008013032056	0.85 .0i1048085054055068045 .011049076050	.041 .029 073 056 043 005 034 051 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 100 120 135 155 150 205 225 240 250 265 270 275 280 285 290 300
DEG 0 25 45 60 70 75 80 85 90 105 110 120 135 180 205 225 240 250 255 260 255 275 280 285	0.10				CP AT X/L=		0.70005013034056055033012 .008013032056056031	0.85 .0:1048085054095088045 .011049076090052	.041 .029 073 056 043 005 034 051 062 091 .026 .044 .026	0 25 45 60 70 75 80 85 90 100 120 135 180 205 225 240 255 270 265 270 275 280 285 290

TABLE 2. - Continued

(b) Continued

ALPHA . 5.02, PHI . 0.0, BODY/TAIL/NO DEFLECTIONS

ORIGINAL PAGE IS OF POOR QUALITY

THETA					CP AT X/L+					THETA
DEG	0.10	0.20	0.30	0.46	0.50	0.60	0.70	0.85	0.95	DEG
0							024	001	.033	٥
25 45									.016	25 45
60							035	043		60
70									080	70
75 80							057	064	~.092	75
85							109	112	082 085	80 85
90							••••	••••	082	90
95							082	097	072	95
100 105							016	113	072 087	100 105
110							••••	- • • • • •	120	110
120							.015	034		120
135 155									.072	135 155
180							.036	.046	.089	160
205									.071	205
225 240							.014	036		225
250							•014	036	119	240 250
255							016	114	087	255
260 265									063	260
270							086	107	069 068	265 270
275							098	10P	084	275
280									091	280
285 290							054	066	093	285 290
300							032	040	084	300
315										315
335									.016	335
		AL PI	HA - 9.99,	P613 •	. 0.0, BC	M\JIAT\¥GC	O DEFLECTI	ONS		
THETA					CP AT X/L					THETA
THE TA DE G	0.10	AL PI	4A - 9.99, 0.30	Pit3 •			0 DEFLECTI 0.70	ONS 0.85	0.95	THETA DEG
OF G O	0.10				CP AT X/L				.029	0 E G
0 0 25	0.10				CP AT X/L		0.70	0.85		0 E G 2 9
0FG 0 25 45	0.10				CP AT X/L		0.70 041	0.85	.029	0 E G 2 5 4 5
0 25 45 60 70	0.10				CP AT X/L		0.70 041 062	0.85 015 077	.029	0 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70 75	0.10				CP AT X/L		0.70 041	0.85	.029 .022 146 133	0 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70 75 80	0.10				CP AT X/L		0.70 041 062 143	0.85 015 077 123	.029 .022 146 133 110	0 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70 75 80 85 90	0.10				CP AT X/L		0.70 041 062 143 132	0.85 015 077 123 130	146 133 110 116	0 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70 75 80 85	0.10				CP AT X/L		0.70 041 062 143	0.85 015 077 123	146 123 110 116 115	0 E G 2 5 4 5 6 0 7 0 7 5 8 0 8 5 9 0
0 25 45 60 70 75 80 85 90 95	0.10				CP AT X/L		0.70 041 062 143 132 096	0.85 015 077 123 130	146 133 110 116 115 131	0 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0 25 45 60 70 75 80 85 90 95 100 1 ^5 110	0.10				CP AT X/L		0.70 041 062 143 132 096	0.85 015 077 123 130 130	146 123 110 116 115	0 EG 0 25 45 60 70 75 80 85 90 95 100 105
0 25 45 60 70 75 80 85 90 95 100 1^5	0.10				CP AT X/L		0.70 041 062 143 132 096	0.85 015 077 123 130	.029 .022 146 123 110 116 115 131	0 EG 0 29 45 60 70 75 80 85 90 100 105
0 25 45 60 70 75 80 85 90 95 100 1^5 110	0.10				CP AT X/L		0.70 041 062 143 132 096	0.85 015 077 123 130 130	.029 .022 146 123 110 116 115 131	0 EG 0 25 45 60 70 75 80 85 90 95 100 105
0 25 45 45 60 70 75 80 85 90 95 100 1^5 110 12c 135 180	0.10				CP AT X/L		0.70 041 062 143 132 096	0.85 015 077 123 130 130	146 133 110 116 115 131 125 149	0 EG 0 29 45 60 70 75 80 85 90 100 105 110 120 135 159
0 25 45 60 70 75 80 85 90 95 100 1^5 110 120 135 155 180 205	0.10				CP AT X/L		0.70 041 062 143 132 096 .016	0.85 015 077 123 130 130 112 001	.022 146 133 110 116 115 135 135 149	0 EG 0 29 45 60 70 75 80 85 90 95 100 105 110 120 135 159 180 209
0 25 45 60 70 75 80 85 90 95 110 110 126 135 180 205 225	0.10				CP AT X/L		0.70 041 062 143 132 096 .016	0.85 015 077 123 130 130 112 001	146 133 110 116 115 131 125 149	0 EG 0 29 45 60 70 75 80 85 90 100 105 110 120 135 159
0 25 45 60 70 75 80 85 90 95 100 1^5 110 120 135 185 180 205 225 240 230	0.10				CP AT X/L		0.70041062143132096 .016 .005	0.85015077123130130112001 .104003	.022 -022 -146 -123 -110 -116 -115 -125 -149	0 EG 0 25 45 60 70 75 80 85 90 100 105 110 120 135 159 180 225 225 240 250
0 25 45 60 70 75 80 85 90 95 100 1^5 110 120 135 185 180 205 225 240 255	0.10				CP AT X/L		0.70 041 062 143 132 096 .016	0.85 015 077 123 130 130 112 001	.022 .022 146 133 110 116 115 131 125 149	0 EG 0 29 45 60 77 75 80 99 100 1105 110 120 135 139 180 203 225 240 255
0 25 45 60 70 75 80 85 90 95 100 1^5 110 120 135 185 180 205 225 240 230	0.10				CP AT X/L		0.70041062143132096 .016 .005	0.85015077123130130112001 .104003	.022 -022 -146 -133 -110 -116 -115 -1131 -125 -149 -149 -140 -159 -139	0 EG 0 25 45 60 70 75 80 85 90 100 105 110 135 150 205 225 240 256 266 265
0 25 45 60 70 75 80 85 90 95 100 11^5 110 12C 135 185 180 205 225 240 255 260 265 270	0.10				CP AT X/L		0.70041062143132096 .016 .065 .091 .063 .019094	0.85015077123130130112001 .1040032129	.022 -022 -146 -133 -110 -116 -115 -131 -125 -149 -140 -159 -139	0 EG 0 29 45 60 77 75 80 95 90 105 110 120 135 139 180 203 225 240 255 260 265
0	0.10				CP AT X/L		0.70041062143132096 .016 .005	0.85015077123130130112001 .104003	.022 146 133 110 116 115 131 125 149 .140 .155 .139	0 EG 0 29 45 60 70 75 80 85 90 100 105 110 120 135 199 180 203 225 240 250 255 260 267
0 25 45 60 70 75 80 85 90 95 100 11^5 110 12C 135 185 180 205 225 240 255 260 265 270	0.10				CP AT X/L		0.70041062143132096 .016 .065 .091 .063 .019094	0.85015077123130130112001 .1040032129	.022146123116115131125149140159144127116114117114114	0 EG 0 29 45 60 77 75 80 85 90 105 110 120 135 159 180 225 240 255 260 265 270 275 280 283
0	0.10				CP AT X/L		0.70041062143132096 .016 .005 .091 .063 .019094133141	0.85015077123130130112001 .1040032129130126	.022 -022 -146 -133 -110 -116 -115 -1131 -125 -149 -149 -140 -159 -144 -127 -116 -116 -116 -116 -116	0 EG 0 25 45 60 70 75 80 85 90 100 105 110 120 135 199 180 203 255 240 250 255 270 275 280 285
0	0.10				CP AT X/L		0.70041062143132096 .016 .005 .091 .003 .019094	0.85015077123130130112001 .1040032129130	.022146123116115131125149140159144127116114117114114	0 EG 0 25 45 60 70 75 80 85 90 105 110 135 150 205 225 240 250 255 260 270 275 280 289 290 300
0	0.10				CP AT X/L		0.70041062143132096 .016 .005 .091 .063 .019094133141	0.85015077123130130112001 .1040032129130126	.022146123116115131125149140159144127116114117114114	0 EG 0 25 45 60 70 75 80 85 90 100 105 110 120 135 199 180 203 255 240 250 255 270 275 280 285

(b) Continued

		ALP	HA = 15.01,	PHI =	0.0,	BODY/TAIL/	NO DEFLECTI	ONS		
THETA	0.10	0.30	0.30	0.40	CP AT		0.20	0.05	0.05	THETA
DE 6	0.10	0.50	0.30	0.40	0.5	0.60	0.70	0.85	0.95	neg
25							076	051	026 024	0 25
45 60							- 140	- 164		45
70							160	154	148	60 70
75							160	147	137	75
80									124	60
85							149	139	137	85
40 95							090	- 130	164	90
100							040	138	141 152	95 100
105							.066	~.090	146	105
110									166	110
120 135							.134	.052		120
155									.229	135 155
180							.166	.187	.245	180
205								-	.729	205
225										225
240 250							.131	-649	- 143	240
255							•367	092	163 153	250 255
260							•••	••••	142	260
265							066	136	141	265
270									128	5,40
275 280							147	-,139	131 126	275 280
285							160	147	133	285
290								• • • •	141	240
360							157	151		300
315 335									019	315 335
		ALPH	4 - 20.01.	PHI =	0.0,	BOOY/TAIL/N	O DEFLECTIO	INS		
THETA					CP AT X			0.05	0.05	THETA
DF6	0.16	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
C							112	082	062	٥
25									000	25
45							- 334	- 149		45
60 70							174	162	139	60 70
75							170	157	138	75
80									132	80
85							161	150	149	85
90 95							075	152	155 154	90 9 5
100									161	100
103							•130	06C	155	10>
110									174	110
120 135							.219	.120		120 135
155									.341	155
180							. 264	.288	.369	160
205									.341	20'
225 240							.215	.116		22 240
250								-210	174	250
255							.129	065	166	255
260									154	260
265 270							076	150	153 147	265 270

-.150

-.158

-.100

-.089

-.165 -.179

-.179

		ALP.	. 25.00.	PHI -	0.0.	BODY/TAIL/NO	D DEFLECTI	ans		
THETA					CP AT X					THETA
DEL	0.10	0.20	0.30	0.40	0.50	0.60	C.70	0.85	0.95	990
0							134	118	114	0
25									127	25
45										45
60							181	166		60
70									141	70
75							178	165	147	75
60									143	60
e 5							175	159	160	85
90 95									163	90
100							~.055	~.165	161	95
105							305		168	100
116							.295	023	161	105
120							.321	.196	179	110
135							•361	•140		120
155									.473	135 155
180							.377	.402	.527	180
205							****		.473	205
225									• • • • • • • • • • • • • • • • • • • •	225
240							.320	.193		240
250									177	250
255							.210	030	173	255
260									162	260
265							046	163	159	265
270									147	270
275							171	159	151	275
560									146	280
285							179	165	141	285
290									134	290
300							178	166		300
315										315
335									116	335

ALPHA .	4.94,	PHI - 22.5,	BODY/TAIL/NO	DEFLECTIONS

THETA					CP AT X/L-					THETA
066	0.10	0.20	0.30	0.40	0.30	0.60	0.70	0.85	0.95	DEE
0							~.023	602	.031	0
25									•020	25
45										45
60							030	D4B		60
70									096	70
75							050	067	096	75
80									082	60
85							089	102	087	85
90									084	90
95							089	083	073	95
100									379	100
105							025	097	084	105
110									117	110
120							.008	045		120
135										135
155									.068	155
180							•032	.043	.001	180
205									•066	205
225										225
240							.016	028		240
250									111	250
255							012	100	080	255
260									051	260
265							072	107	055	265
270									060	270
275							095	109	080	275
280									080	280
285							069	054	064	285
290									049	290
300							033	033		300
315										315
335									•015	335

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Continued

(b) Continued

ALPHA = 9.94. PHI = 22.5. BODY/TAIL/NO BEFLECTIONS

THETA					CP AT M/L-					THETA
0£6	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEE
0 25							039	013	.036 .017	0 25
45										45
60 70							048	077	140	60 70
75							138	121	131	75
50									114	80
85 90							123	113	110	85
95							120	116	104 106	90 95
100								-0110	126	166
105							012	128	126	105
110 120							043	034	153	110
135							-043	-•026		126 135
155									.129	155
180							.081	- 096	.135	180
205 225									.130	205
240							.066	.014		225 240
250							•••	***	147	250
255							•032	094	135	255
260 265							- 644		125	560
270							664	120	123 108	265 270
275							135	132	10G	27:
28C									079	284
285 290							135	147	083	285
365							124	129	086	290 300
315								•=•		315
335									-054	335
TMETA DEG		ALPH	A = 14.96,	PHI .	22.5, 800	Y/TAIL/NO	DEFLECTE	INS		
	0.10				CP AT X/L=				0.95	THETA DEG
0 25	0.10	Д ЕРН 0.20	0.30	PH[=		O.60	0.70 077	0.85 042	0.95 020 000	0 0
25 45	0-10				CP AT X/L=		0.70 077	0.85 042		0E6 0 25 45
25	0-10				CP AT X/L=		0.70 077 098	0.85 042 121	020 000	066 25 45 60 70
25 45 60 70 75	0.10				CP AT X/L=		0.70 077	0.85 042	020 000 155 150	0E6 25 45 60 70 75
25 45 60 70 75 80	0.10				CP AT X/L=		0.70 077 098 141	0.85 042 121 134	020 000 155 150 128	0 6 0 2 5 4 5 6 0 7 0 7 5 8 0
25 45 60 70 75	0.10				CP AT X/L=		0.70 077 098	0.85 042 121	020 000 155 150 128 134	0E6 25 45 60 70 75
25 45 60 70 75 85 85 90	0.10				CP AT X/L=		0.70 077 098 141	0.85 042 121 134	020 000 155 150 128 134 134	0E6 0 25 45 60 70 75 80 85 90
25 45 60 70 75 60 85 90 95	0.10				CP AT X/L=		0.70 077 098 141 135 129	0.85 042 121 134 125 123	020 000 155 150 128 134 134 134	0E6 0 25 45 60 70 75 80 85 90 95
25 45 60 70 75 60 85 90 95 100	0.10				CP AT X/L=		0.70 077 098 141 135	0.85 042 121 134 125	020 000 155 150 128 134 134 150 146	0 E G 2 5 4 5 6 0 7 0 7 5 8 0 8 5 9 0 9 5 10 0
25 45 60 70 75 60 85 90 95	0.10				CP AT X/L=		0.70 077 098 141 135 129	0.85 042 121 134 125 123	020 000 155 150 128 134 134 134	0E6 0 25 45 60 70 75 80 85 90 95
25 60 70 75 85 90 95 100 105 110 120	0.10				CP AT X/L=		0.70 077 098 141 135 129	0.85 042 121 134 125 123	020 000 155 150 128 134 134 136 150 166	0 E 6 0 2 5 4 5 6 0 70 75 8 0 95 9 0 95 100 105 110 120
25 45 60 70 75 85 90 95 100 105 110 120 135	0.10				CP AT X/L=		0.70 077 098 141 135 129 .013	0.85 042 121 134 125 123 124	020 000 155 130 128 134 134 130 160	0 E 6 0 2 5 4 5 6 0 7 0 7 5 8 0 9 5 1 0 0 1 1 0 1 2 0 1 3 5 1 5 5
25 45 60 70 75 60 85 90 100 105 110 120 135 155 180	0.10				CP AT X/L=		0.70 077 098 141 135 129	0.85 042 121 134 125 123	020 000 155 150 128 134 134 150 146 165	0 E 6 2 2 3 4 5 6 6 6 6 7 7 0 7 5 8 5 9 6 9 5 1 0 0 1 0 5 1 1 0 0 1 2 0 1 2 0 1 3 5
25 45 60 70 75 85 90 95 100 105 110 120 135 155 180 205 225	0.10				CP AT X/L=		0.70 077 098 141 135 129 .013 .090	0.85 042 121 134 125 123 124 .007	020 000 155 130 128 134 134 130 160	0 E 6 0 2 3 4 5 6 6 6 6 7 6 7 5 8 0 9 5 1 0 0 1 2 0 1 2 5 1 1 2 0 1 2 5 1 2 5 1 2 0 5 2 2 5
25 45 60 70 75 60 85 95 100 105 110 120 135 155 180 205 225 240	0.10				CP AT X/L=		0.70 077 098 141 135 129 .013	0.85 042 121 134 125 123 124	020 000 155 150 128 134 134 134 150 165	0 E 6 0 25 45 60 70 75 80 85 90 105 110 120 135 155 150 205 225
25 45 60 70 75 85 90 95 100 105 110 120 135 155 180 205 225	0.10				CP AT X/L=		0.70 077 098 141 135 129 .013 .090	0.85 042 121 134 125 123 124 .007	020 000 155 150 128 134 134 150 146 165	0 E 6 0 2 3 4 5 6 6 6 6 7 6 7 5 8 0 9 5 1 0 0 1 2 0 1 2 5 1 1 2 0 1 2 5 1 2 5 1 2 0 5 2 2 5
25 45 60 70 75 60 85 95 100 105 110 120 135 180 205 240 250 250 250 260	0.10				CP AT X/L=		0.70077098141135129 .013 .090 .144 .133	0.65 042 121 134 125 123 124 .007 .163	020 000 155 130 128 134 134 130 165 165	0 E 6 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205 225 240 250 255 260
25 45 60 70 75 85 90 95 100 105 110 120 135 135 180 205 225 240 250 250 265	0.10				CP AT X/L=		0.70 077 098 141 135 129 .013 .090	0.65 042 121 134 125 123 124 .007	020 000 155 150 128 134 134 136 165 165	0 E 6 0 25 45 60 70 75 80 85 90 105 110 120 135 155 160 205 225 240 250 255 260 265
25 60 70 75 85 90 100 105 110 120 135 135 180 205 225 240 250 250 260 265 270	0.10				CP AT X/L=		0.70077098141135129 .013 .090144 .133 .090042	0.85042121134125123124 .007 .163 .066070132	020 000 155 150 128 134 134 150 166 105	0 E 6 0 25 45 60 75 80 95 100 110 120 135 155 180 225 240 250 250 265 265
25 45 60 70 75 85 90 93 100 103 110 120 135 195 190 205 225 240 250 250 250 265 270 270 270 270 270	0.10				CP AT X/L=		0.70077098141135129 .013 .090 .144 .133 .090042151	0.65042121134125123124 .007 .163 .066070132134	020 000 155 150 128 134 134 134 150 146 165	0 E 6 0 25 45 60 70 75 80 85 90 105 110 135 155 160 205 225 240 250 255 260 270 275 275
25 45 60 70 75 85 90 100 105 110 120 135 155 180 205 225 240 250 250 250 270 270 270 270 270 270 270 270 270 27	0.10				CP AT X/L=		0.70077098141135129 .013 .090144 .133 .090042	0.85042121134125123124 .007 .163 .066070132	020 000 155 150 128 134 134 136 165 165 165 165 165 165 169 189 148 139 148 138 125 120 120	0 E 6 0 25 45 60 70 75 80 90 90 105 110 120 135 155 205 240 255 240 255 265 270 270 270 286
25 45 60 70 75 80 85 95 100 105 110 120 135 180 205 240 250 250 260 275 260 275 280 285 290	0.10				CP AT X/L=		0.70077098141135129 .013 .090 .144 .133 .090042151	0.85042121134125123124 .007 .163 .066070132134103	020 000 155 150 128 134 134 134 150 146 165	0 E 6 0 25 45 45 70 75 85 90 105 110 120 125 240 255 240 255 240 255 270 275 280 290
25 45 60 70 75 85 90 100 105 110 120 135 155 180 205 225 240 250 250 250 270 270 270 270 270 270 270 270 270 27	0.10				CP AT X/L=		0.70077098141135129 .013 .090 .144 .133 .090042151	0.65042121134125123124 .007 .163 .066070132134	020 000 155 150 128 134 134 136 165 165 165 165 165 165 169 189 148 139 148 138 125 120 120	0 E 6 0 25 45 60 75 80 90 90 110 120 135 140 225 240 255 265 270 270 278 278 278
25 45 60 70 75 60 65 95 100 107 110 120 135 195 205 225 240 250 250 270 270 270 270 280 280 280 280 280	0.10				CP AT X/L=		0.70077098141135129 .013 .090 .144 .133 .090042151	0.85042121134125123124 .007 .163 .066070132134103	020 000 155 150 128 134 134 136 165 165 165 165 165 165 169 189 148 139 148 138 125 120 120	0 E 6 0 25 45 60 70 75 85 90 105 110 135 155 205 225 240 250 270 275 280 285 290 300

(b) Continued

ALPHA . 19.94, PHI . 22.5, BODY/TAIL/NO DEFLECTIONS

THETA					CP AT X/L+					THETA
DEC	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.65	V. 95	DEC
0							156	13¢	163	0
25 45									089	25 45
60							125	142		60
76 75							- 146		146	70
75 80							145	139	137 116	75 e 0
85							139	126	125	85
90									142	90
95 100							125	122	147 158	95 100
105							.056	106	152	165
110								***	175	110
120 135							.159	•05€		120 135
155									.310	155
18C							.235	.259	.313	180
205 225									.319	205 225
240							.230	.145		240
250							. 26		155	250
255 260							.175	028	141 132	255 260
265							005	152	120	265
270									125	270
275 280							170	148	120 103	275 290
205							172	169	097	205
290									101	290
300 315							174	175		300 315
335									~.151	335
		ALPH	14 = 24.96,	PHI =	22.5, 80	DY/TAIL/NO) DEFLECTI	On S		
THETA					CP AT X/L.					THETA
TMETA DEG	0.10	ALPH 0.20	0.30	PHI =		DY/TAIL/NO 0.60	0.70	0.85	0.95	THETA DEG
0	0.10				CP AT X/L.				167	DE6 O
0 0 0	0-10				CP AT X/L.		0.70	0.85		DEG G 25
0 25 45	0-10				CP AT X/L.		0.70	0.85	167	DEG G 25 45 60
0 25 45 60 70	0.10				CP AT X/L.		0.70 177 145	0.85 168 151	167 172	DEG G 25 45 60 70
0 25 45 45 60 70 75	0.10				CP AT X/L.		0.70 177	0.85 168	187 172 114 101	DEG 0 25 45 60 70 75
0 25 45 60 70	0.10				CP AT X/L.		0.70 177 145	0.85 168 151	187 172 114 101 098 131	DEG G 25 45 60 70 75 80 85
0 25 45 60 70 75 80 85 90	0.10				CP AT X/L.		0.70 177 145 145 140	0.85 168 151 145 126	187 172 114 101 098 131 153	DE6 G 25 45 60 70 75 80 85
0 25 45 60 70 75 80 85 90 95	0.10				CP AT X/L.		0.70 177 145 145	0.85 168 151 145	187 172 114 101 098 131 153	DEG G 25 45 60 70 75 80 85
0 25 45 40 70 75 80 85 90 100 105	0-10				CP AT X/L.		0.70 177 145 145 140	0.85 168 151 145 126	187 172 114 101 098 131 153 156 164	0 E G C C C C C C C C C C C C C C C C C C
0 0 25 45 60 70 75 80 85 90 95 100 105 110	0-10				CP AT X/L.		0.70 177 145 145 140 117	0.85 168 151 145 126 126 084	187 172 114 101 098 131 153 156	DE6 0 25 45 60 70 75 80 85 90 95 100 105
0 25 45 60 70 75 80 85 90 100 100 110 120	0-10				CP AT X/L.		0.70 177 145 145 140 117	0.85 168 151 145 126 126	187 172 114 101 008 131 153 156 164 156	0 E G C C C C C C C C C C C C C C C C C C
0 25 45 60 70 75 80 85 90 95 100 120 120 135 155	0-10				CP AT X/L.		0.70 177 145 145 140 117 .104	0.85168151165126120084 .115	187 172 114 101 008 131 153 156 164 164	DE6 G 25 45 60 70 75 80 85 90 95 100 120 120 125
0 25 45 60 70 75 80 85 90 105 110 120 135 155 180	0-10				CP AT X/L.		0.70 177 145 145 140 117	0.85 168 151 145 126 126 084	187 172 114 101 098 131 156 156 156 281	DE6 C 25 45 60 70 75 80 85 90 100 105 110 120 135 155
0 25 45 60 70 75 80 85 90 95 100 120 120 135 155	0.10				CP AT X/L.		0.70177145145140117 .104 .238	0.85168151165126126084 .115	187 172 114 101 008 131 153 156 164 164	0E6 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 225
0 25 45 60 70 75 80 85 90 100 105 110 120 125 125 126 240	0.10				CP AT X/L.		0.70 177 145 145 140 117 .104	0.85168151165126120084 .115	187172114101098131153156164156181	0 E G C C C C C C C C C C C C C C C C C C
0 0 25 45 60 770 775 80 85 90 100 120 120 120 125 120 120 125 126 125 125 125 125 125 125 125 125 125 125	0.10				CP AT X/L.		0.70177145145140117 .104 .238	0.85168151165126126084 .115	187172114101008131153156164156281434432442	0E6 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 225
0 25 45 60 70 75 80 85 90 100 110 120 125 125 125 1250 1250 1260 1260 1260 1260 1260 1260 1260 126	0.10				CP AT X/L.		0.70 177 145 145 140 117 .104 .238 .339	0.85166151145126126084 .115 .361 .233	187172114101098131156156156156156151152141137122	0E6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 180 205 225 240 250 250
0 0 25 45 60 70 75 80 85 90 105 1100 125 120 225 225 2250 2255 2250 2255	0.10				CP AT X/L.		0.70177145145140117 .104 .238 .339	0.85168151145126126084 .115 .361	187172114101098131153156156181156181137122121	0E6 0 25 45 60 77 75 80 85 90 105 110 120 135 155 180 205 225 240 250 260
0 25 45 60 70 75 80 85 90 100 110 120 125 125 125 1250 1250 1260 1260 1260 1260 1260 1260 1260 126	0.10				CP AT X/L.		0.70 177 145 145 140 117 .104 .238 .339	0.85166151145126126084 .115 .361 .233	187172114101098131156156156156151152141137122121117116	0E6 025 45 60 70 75 80 85 90 100 105 110 120 135 180 205 250 250 255 260 265 2770 2775
0 25 45 60 770 775 80 90 105 120 125 125 2250 2250 2250 2250 22	0.10				CP AT X/L.		0.70177145145140117 .104 .238 .339 .340 .274 .042166	0.85168151145126126084 .115 .301 .233 .025142169	187172114101098131153156156181156181137122121117116111	0 E G 25 45 60 70 75 80 85 90 105 110 135 159 180 205 225 240 250 255 270 275 280
0 25 45 60 70 75 80 90 100 1100 120 135 150 225 240 250 270 270 285	0.10				CP AT X/L.		0.70177145145140117 .104 .238 .339 .340 .274	0.85168151165126126084 .115 .361 .233 .025142	187172114101008131153156164156181137122121117116111108	0 E G 25 45 60 70 75 80 85 90 105 110 120 135 155 160 205 225 240 250 255 260 270 275 280 285
0 25 45 60 77 75 80 90 105 120 125 125 225 2250 2250 2250 225	0.10				CP AT X/L.		0.70177145145140117 .104 .238 .339 .340 .274 .042166	0.85168151145126126084 .115 .301 .233 .025142169	187172114101098131153156156181156181137122121117116111	0 E G 25 45 60 77 75 80 85 90 105 110 115 110 120 135 255 240 255 240 255 270 275 280 285 290 300
0 25 45 60 70 75 85 90 100 1100 1205 1205 1205 1205 1205 1205	0.10				CP AT X/L.		0.70177145145140117 .104 .238 .339 .340 .274 .042186185	0.85168151165126126084 .115 .361 .233 .025162169175	187172114101008131153156164156181137122121117116111108	0E6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 159 180 205 250 255 260 265 277 280 285

(b) Continued

ALPHA = 4.65, PHI = 45.0, BODY/TAIL/NO DEFLECTIONS

			- 4,03,	-116	*****	0.1 I # 1 E 1 M	, oertetit) /// 3		
THE TA DEG	G.10	0.20	0.30	0.40	CP AT X/L= 0.>0	0.60	0.70	0.85	0.95	THETA DEG
0 25							055	003	.031	0 25
45 60 70							026	054		45 6G
75 80							042	672	111 105	70 75
8 5							069	096	092 089	60 65
9(. 9 <u>%</u>							089	071	085 093	90 95
10L 163							035	085	085 085	100 105
11: 1:0							00>	058	112	110 120
135 155									.061	235 155
180 705							•056	.037	.067 .058	180 205
225 240							•012	653		225 240
250 255							011	101	109 002	250 255
260 265							057	108	034 039	260 265
270 275							092	105	062 070	270 275
280 285							066	046	049 026	280 285
290 300							033	029	015	290 300
315 335									-004	315 335
		ALPH	14 - 9.04,	PH1 =	45.0, 80	DY/TAIL/N	O DEFLECTI	DNS		
THETA					CP AT X/L+	• • •				THETA
066	0.16	0.20	0.30	0.40	0.50	0.60	0.70 036	0.85 013	0.95 •021	DEG
25 45							-1036	-1013	.016	25 45
6C 70							038	072	140	60 70
75 80							068	119	132 115	75 80
85 90							106	107	126 111	85 90
95 106							107	101	093 118	95 100
105 110							-,041	106	125 153	105 110
120 135							.012	054		120 135
155 180							.058	•072	.098 .101	155 180
205 221									-103	205 225
240 250							.053	•014	082	240 230
255 260							.031	081	063 057	255 260
265 270							036	125	041	265 270
279 280							139	124	056 051	275 280
295 295							124	138	053 069	285 290
365 315									,	
335							104	081	~.005	300 315 335

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Continued

		ALPH	A - 14.67.	PHI - 4	5.0, 8	ODY/TAIL/N	O DEFLECTI	DNS		
THETA					CP AT X/L	•				THETA
DEG	0.10	0.20	0.30	0.49	0.50	0.60	0.10	0.35	0.95	930
C							132	108	~.099	0
25									~.072	25
45										45
60							070	103		60
70									144	70
75							110	128	136	75
BC									125	8 C
85							109	121	112	85
90									106	90
95							105	111	24	95
100									155	100
105							030	115	147	105
110									173	110
120							.037	040		150
135										135
155									.149	155
180							.102	.122	.153	180
205									.163	205
225										225
240							.112	.070		240
250									094	250
255							.094	046	080	255
260									069	260
265							.005	136	064	265
270									055	270
275							164	136	048	275
58C									052	2 80
285							148	144	062	285
290									065	290
300							142	140		300
315										315
335									100	335

		ALPH	M - 19.65,	PHI - 4	5.0, 8	BODY/TAIL/N	O DEFLECTIO	DNS		
THETA					CP AT X/L	L =				THETA
066	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							144	136	-,143	٥
25									158	25
45										45
60							117	164		60
70									128	70
75							124	136	125	75
80									122	80
85							111	150	120	85
90									126	90
95							104	115	146	95
100									168	100
105							025	123	157	105
110									183	110
120							.072	-,017		120
135										135
155									.224	155
10,							.162	.184	.209	180
205									.247	205
225										225
240							.192	.141		240
250									079	250
255							.178	.005	052	255
260									040	260
265							.065	121	028	265
270									026	270
275							160	147	043	275
200									074	280
285							152	146	095	285
290									084	290
300							~.155	148		300
315										315
335									145	335

TABLE 2.- Continued ORIGINAL PAGE IS OF POOR QUALITY

(b) Concluded

		4(P+	lå = 24.60,	PHI • 4	5.0, 80	OY/TAIL/N	0 DEFLECTI	ONS		
THETA					CP AT X/L-	•				THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
25 0							162	152	176	٥
52									169	25
45										45
60							173	170		60
70									110	70
75							147	173	100	75
80									118	60
65							116	148	146	85
90									166	40
95							1CZ	133	171	95
100									184	100
105							004	137	166	105
110									193	110
120							.115	.012		120
135										135
155									-311	155
160							.234	.257	-596	180
205									• 332	205
225										225
240							.287	.230		240
250									049	250
255							.277	.071	039	255
260									017	260
265							.137	086	002	265
270									-002	270
275							152	176	-017	275
200									-021	280
285							164	176	-065	285
290									011	290
300							163	174		300
315										315
335									157	335

ORIGINAL PAGE 16 OF POOR QUALITY

TABLE 2.- Continued

(c) Body-wing-tail configuration

		ALPHA = -5.03,	PHI . 0.0,	BODA\#IME\1VI	L/NO DEFLEC	24017		
THE TA DE G	0.10	0.20 0.30	CP AT 0.40 C.		0.70	0.85	0.95	THE TA DEG
0 25 45					.031	•047	.081	0 25 45
60					•022	030		60
70 75					- 011	- 022	093	70 75
80					011	022	064 040	80
85					.004	025	031	85
90 95						200	015	30
100					112	088	047 060	95 100
105					060	095	055	105
110 120					034	059	069	110 120
135					-1034	- 6074		135
155							.011	155
160 205					009	- 000	.031 .006	180
225							.006	205 225
240					030	054		240
250					244		089	250
255 260					066	096	073 064	255 260
265					113	094	055	265
270							009	270
275 280					004	025	024 043	275 280
285					014	024	063	285
590							092	290
300 315					.019	029		300 315
335							.073	335
		ALPHA00,	PHI = 0.0,	8DDY/WING/TAI	L/NO DEFLE	CTIONS		
THETA DEG	0.10	0.20 0.30	0.40 CP AT	X/L= 50 0.60	0.70	0.85	0.95	THETA DEG
0 25 45					004	-011	.039 .033	0 25 45
60					012	044		60
70							081	70
75 80					031	~.058	057 039	75 80
85					040	~.055	027	85
90 95					039	~.049	015 030	90 95
100					-,034	044	045	100
105					029	~.053	051	105
110 120					010	041	075	110 120
135					-1010	-1041		135
155					•••		.033	155
180 205					.010	.013	.046 .029	180 205
225								225
240					010	043	_ ^^7	240
250 255					030	056	087 063	250 255
260							048	260
265 270					042	053	032 014	265 270
270 275					036	052	027	275
280							043	280
285 290					032	056	055 078	285 290
300					013	042	-0.0	300
315							^22	315
335							.032	. 335

TABLE 2.- Continued

ORIGINAL PAGE IS OF POOR QUALITY

(c) Continued

ALPHA = 5.01, PHI = 0.0, BODY/WING/TAIL/NO DEFLECTIONS

THE TA					CP AT X/L=					THETA
DEG	0.10	0.20	9.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
c							024	001	.022	0
25									.011	25
45 60							034	060		45 40
70							-1034	-000	076	70
75							060	099	063	75
80 85							121	089	053 047	60 65
90							121		015	90
95							002	023	030	95
100									045	100
105 116							013	020	058 092	105 110
120							.017	029	••••	120
13>										135
155 180							.039	•050	.079 .091	155 180
205								•••	.072	205
225										525
240 250							-014	030	094	240 250
255							015	025	067	255
260									042	260
265							026	029	020	265
270 2 75							113	090	008 043	270 275
28C									057	280
285							061	099	070	285
290 300							034	053	087	290 300
315							-1034	-1073		315
335									.008	335
		ALPHA	- 10.00,	PHI = 0	.0, 9001	Y/WING/TAI	L/NO DEFLE	CTIONS		
						_				THETA
THETA DEG	C.10	0.50	0.30	0.40	CP AT X/L: 0.50	0.60	0.70	0.85	0.95	DEG
0							040	~.015	.014	.0
25									.011	25 45
45 60							063	085		60
70									117	70
75							147	163	100 074	75 80
90 85							146	163	092	65
90									111	90
95							.017	•006	101 121	95 100
100 105							.020	.011	112	105
110									139	110
120							.067	.001		120 135
135 155									.148	155
180							.093	-106	.158	180
205 225									.130	205 225
240							.065	.001		240
250									124	250
255 260							•021	.007	123 115	255 260
260 265							.008	003	107	265
270									090	270
275 280							145	166	078 071	275 280
285							144	158	093	285
290									108	290
300 315							061	080		300 315
									.009	335
335										

ORIGINAL PAGE 18 OF POOR QUALITY

TABLE 2.- Continued

		ALPHA •	14.99,	• IH9	0.0.	BODY/	ilat/ənt	./NO DEFLEC	TIONS		
THETA DEG	0.10	0.20	0.30	0.40	CP	AT X/L= G.50	0.60	0.70	0.85	0.95	THETA DEG
0 25 45								074	650	029 031	0 25 45
60								159	163		60
70										140	70
75 80								159	181	146 127	75 80
85								165	176	144	85
90										144	90
95 100								.047	•051	129 129	95 100
105								.069	.062	120	105
110										142	110
12G 135								.134	.055		120 135
155										.241	155
180								.169	•190	.249	180
205 225										•227	205 225
240								•132	.053		240
250 255								.070	05.7	137	250
260								.070	.057	134 132	255 260
265								.043	.043	133	265
270 275								- 144	- 174	127	270
280								164	176	137 137	275 280
285								159	177	142	285
290 300								- 166	. 163	134	290
315								155	157		300 315
335										025	335
		ALPHA	• 20.01,	PHI =	0.0,	900Y	/WING/TAI	L/NO DEFLE	CTIONS		
THETA DEG	0.10	0.20	0.30	0.40		0.50	0.60	0.70	0.05	0.95	THETA Deg
6 25								105	080	064 093	0 25
45								174	186		45 60
60 70								-4174	• • • • •	139	70
75								169	189	145	75
80 85								184	187	142 152	80 85
90										147	90
95								-090	.108	131	95 100
100 105								.134	.128	120 100	105
110										133	110
120								•551	.121		120 135
135 155											
100										.355	155
								-264	.289	.371	180
205								.264	.289		180 205
225 240								.264	.289	.371 .337	180 205 225 240
225 240 250								•219	•119	.371 .337	180 205 225 240 250
225 240 250 255										.371 .337 134 127	180 205 225 240 250 253
225 240 250 255 260 265								•219	•119	134 127 127 134	180 205 225 240 250 255 260 265
225 240 250 255 260 265 270								.219 .135 .086	.119 .123 .101	134 127 127 127 134 137	180 205 225 240 250 255 260 265 270
225 240 250 255 260 265 270 275								•219 •135	•119 •123	134 127 127 127 134 137 147	180 205 225 240 250 255 260 265
225 240 250 255 260 265 270 275 280 285								.219 .135 .086	.119 .123 .101	.371 .337 134 127 127 134 137 147 149	180 205 225 240 250 255 260 269 279 280 285
225 240 250 255 265 275 275 280 285 290								.219 .135 .086 185 171	.119 .123 .101 185 186	.371 .337 134 127 127 134 137 147 149	180 203 225 240 250 253 263 270 273 280 285
225 240 250 255 260 265 270 275 280 285								.219 .135 .086 185	.119 .123 .101 185	.371 .337 134 127 127 134 137 147 149	180 205 225 240 250 255 260 269 279 280 285

TABLE 2.- Continued

(c) Continued

ORIGINAL PAGE 階 OF POOR QUALITY

THETA					CP AT X/L=					THET
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							134	116	116	0
25									130	25
45										45
60							181	191		60
70									140	70
75							177	192	141	75
80									138	80
85							195	191	153	85
90									151	90
95							.150	.184	127	95
100									106	100
105							.210	.216	091	105
110									116	110
120							.323	.201		120
135										135
155									.490	155
162							.379	• 405	.529	180
205									.470	205
225										225
240							.321	.196		240
250									121	250
255							.212	.210	114	255
560									117	260
265							.144	.176	129	265
270									142	270
275							193	188	147	275
280									142	280
285							180	188	139	285
290									137	290
300							179	185		300
315									-	315
335									117	335

		ALPHA	4.94,	PHI - 22.	5, BODY	/wing/tal	L/NO DEFLE	CTIONS		
THETA					CP AT X/L.					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							022	002	.021	0
25									.016	25
45										45
60							070	062		60
70									099	70
75							053	095	184	75
80									072	80
85							109	084	065	85
90									032	90
95							009	036	045	95
100									061	100
105							022	629	068	105
110									113	110
120							.009	042		120
135										135
155									.075	155
100							.035	.046	.085	180
205									.066	205
225										225
240							.017	019		240
250							••••		088	250
255							009	022	053	255
260							••••		019	260
265							017	033	.002	265
270							•••		.008	270
275							110	095	021	275
280							****	••••	031	280
285							075	091	050	285
290							0.7	- 1071	067	290
300							033	048	-+007	300
							033	046		315
315									.009	335
335									.004	337

		AL PHA	- 9.93,	PHI = 22	2.5,	800Y/	WING/TAI	L/NO DEFLE	CTIONS		
THE TA DE G	0.10	^ 20	0.30	0.40	CP	AT K/t.	0.60	0.70	0.85	0.95	THETA DEG
0 25								040	013	.018	0 25
45 60								048	081		45 60
70 75									- 160	126	70
80								141	150	123 098	75 80
85 90								141	142	070	85 90
95								019	024	082 096	95
100 105								009	020	112 108	100 105
110										150	110
120 135								.045	024		120 135
155										.137	155
180 205								.083	.099	.142 .130	180 205
225										1130	225
240 250								.067	•022	094	240 250
255								.032	.027	093	255
260 265								.011	002	091 089	260 265
270										089	270
275 290								148	156	095 076	275 280
285								141	158	064	265
290 300								126	131	057	290 300
315 335										.029	315 335
		ALPHA	= 14.94,	PHI • 22	2.5,	8004/	WING/TAI	L/NO DEFLE	CTIONS		
THE TA NEG	0.10	0.20	0.30	0.40	CP	AT X/L.	0.60	0.70	0.85	0.95	THETA
0 25 45								076	040	025 005	0 25 45
60								096	120		60
70 75								141	169	153 142	70 75
80										108	80
85 90								154	168	121 141	85 90
95								021	609	135	95 100
100 105								.020	001	148 139	105
110 120								.097	.013	171	110 120
135								•••	.013		135
155 180								.152	-172	.217 .219	155 160
205										.210	205
225 240								.140	.078		225 240
250										074	250
255 260								•096	•099	~.070 ~.077	255 260
265 270								.088	.071	081 097	265 270
275								159	163	109	275
280 285								158	161	117	280 285
290											
300										122 116	290
315								161	-,157		

TABLE 2.- Continued ORIGINAL PAGE IS OF POOR QUALITY

		ALPHA	- 19.94,	PHI • 22.	5, 80DY	1AT\DN1#\	L/NO DEFLE	CTIONS		
THETA				ı	CP AT X/L=					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
Q							152	135	165	٥
25									093	25
45										45
60							125	143		60
70									143	70
75							145	176	:16	75
90									102	80
95							159	178	13f	85
90									15	90
95							009	•022	15	95
100									1t	200 05
105							.060	.031	15.	'05
110									175	1.0
120							.162	.062		120
135										120
155									.323	155
180							.238	.263	.324	180
205									.322	205
225										225
240							.233	.155		240
250									032	250
255							.179	.193	035	255
260									055	260
592							.180	.155	066	265
270							••••		081	270
275							184	170	089	275
280									095	280
285							171	173	100	285
290									093	290
300							171	169		-00
315							-4111	107		315
335									146	335
337										337

		ALPHA	= 24,94,	PHI = 22.	5, RODY	/WING/TAI	L/NO DEFLE	CTIONS		
THETA					CP AT X/L=					THETA
DEG	J.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							176	166	~.185	0
25									173	25
45										45
6 C							146	166		60
70									108	70
75							147	173	100	75
ÐŲ									115	80
85							161	176	154	85
60									165	90
95							.015	.067	162	95
100									159	100
105							.103	•077	147	105
110									171	110
120							.240	-117		120
135										135
155									.453	155
190							.340	.367	.445	180
205									.454	205
225										225
240							.342	.257		240
250									.027	250
255							.276	.306	.010	255
260									028	260
265							.279	. 254	056	265
270									097	270
275							168	174	126	275
280									121	280
285							169	176	119	285
290								= -	120	290
300							-,179	174		300
315										315
335									157	335

TABLE 2.- Continued

ORIGINAL PAGE IS OF POOR QUALITY

(c) Continued

ALPHA = 4.60. PHI = 45.0, BODY/WING/TAIL/NO DEFLECTIONS

THETA					CP.	AT X/L=					THETA
DEC	C.1C	0.20	0.30	0.40		0.50	0.60	0.70	S 5	0.45	DEG
0 25								021	003	.022	0 25
45 60								026	063		45 60
70										116	70
75 80								044	087	098 064	75 80
85								087	074	-,075	85
90										047	90
95 100								016	039	066 075	95
105								032	039	080	100 105
110										116	110
120 135								001	055		120
155										.068	135 155
186								.028	.039	.072	180
205 225										.059	205
240								.013	012		225 240
250								****		059	250
255								009	021	~.032	255
26C 265								012	034	.001	260 265
270									****	.031	270
275								100	094	.009	275
280 285								069	082	008 022	280 285
290								••••	••••	059	290
300								033	042		300
315 335										.005	315 335
		AL PHA	• 9.61,	PHI = 45	•0•	800Y/	M [NG / TA]	L/NO DEFLE	CT I ONS		
THETA DEG	0.10	0.20	0.30	0.40							
0 25				0.70	CP	AT X/L=	0.60	0.70	0.85	0.95	THETA DEG
45 60				0.40	CP	AT X/L= 0.50	0.60	0.70	0.85	0.95 .004 .007	DEG
70 75				0.40	CP		0.60			•004 •007	0 25 45 60
80				0.40	CP		0.60	034	011 073	.004 .007	0 25 45 60 70
85				0.10	CP.		0.60	034	011	.004 .007 149 137	DEG 25 45 60 70 75
90				0.40	CP		0.60	034	011 073	.004 .007 149 137 120 126	DEG 0 25 45 60 70 75 80 85
0.6				0.40	CP		0.60	034 037 068 118	011 073 122 115	.004 .007 149 137 120 126	DEG 0 25 45 60 70 75 80 85
95 166				0.40	CP		0.60	034 037 068	011 073 122	149 137 120 126 .083	DEG 0 25 45 60 70 75 80 85 90
100 105				0.40	CP		0.60	034 037 068 118	011 073 122 115	.004 .007 149 137 120 126 .083 074 109	DEG 0 25 45 60 70 75 80 85 90 95
166 105 110				0.40	CP.		0.60	034 037 068 118 042 039	011 073 122 115 054 051	149 137 120 126 083 074 109	DEG 0 25 45 60 70 75 80 85 90 95 100 105
100 105					CP.		0.60	034 037 068 118 042	011 073 122 115 054	.004 .007 149 137 120 126 .083 074 109	DEG 0 25 45 60 70 75 80 85 90 95
100 105 110 120 135 155					CP.		0.60	034 037 068 118 042 039	011 073 122 115 054 051	.004 .007 149 137 120 025 074 109 110 136	DEG 0 25 45 60 70 75 80 95 100 120 125 135
100 105 110 120 135 155 180							0.60	034 037 068 118 042 039	011 073 122 115 054 051	.004 .007	0 E G
100 105 110 120 135 155 180 205					CP.		0.60	034 037 068 118 042 039 .014 .060	011073122115054051052	.004 .007 149 137 120 025 074 109 110 136	0 E G
100 105 110 120 135 155 180 205 225 240					CP.		0.60	034 037 068 118 042 039	011 073 122 115 054 051	.004 .007 149 137 120 125 083 074 110 136	0 E G
100 105 110 120 135 155 180 205 225 240					CP.		0.60	034 037 068 118 042 039 .014 .060	011073122115054051052 .076	.004 .007 149 137 120 128 083 074 110 136	0 E G
100 105 110 120 135 155 180 205 225 240 250 250 250					CP.		0.60	034 037 068 118 042 039 .014 .060 .055 .034	011073122115054051052 .076	.004 .007	0 E G
100 105 110 120 135 180 205 225 240 250 250 260					CP.		0.60	034 037 068 118 042 039 .014 .060	011073122115054051052 .076	.004 .007	0 E G 0 25 45 60 70 75 80 85 90 95 100 125 120 125 225 240 255 260 265
100 105 110 120 135 155 160 205 225 240 250 255 260 265 270					CP.		0.60	034 037 068 118 042 039 .014 .060 .095 .034	011073122115054051052 .076 .035 .030	.004 .007	0 E G
100 105 110 120 135 190 205 225 240 250 250 260 270 270					CP.		0.60	034 037 068 118 042 039 .014 .060 .095 .034 .037 140	011073122115094051052 .076 .035 .030 .000144	.004 .007 149 137 120 083 074 110 136 07 110 136	0 E G 0 25 45 60 70 75 80 85 90 105 110 125 155 160 205 225 240 250 255 260 275 280
100 105 110 120 135 155 150 205 240 250 250 250 265 270 265					CP .		0.60	034 037 068 118 042 039 .014 .060 .095 .034	011073122115054051052 .076 .035 .030	.004 .007 149 137 120 .003 074 109 110 136 .107 .110 .107	0 E G 0 25 45 60 77 79 80 95 100 125 110 120 135 155 180 205 225 240 255 260 265 270 275 280
100 105 110 120 135 180 205 240 250 250 250 260 260 260 260 260 260 260 260 260 26					CP .		0.60	034 037 068 118 042 039 .014 .060 .095 .034 .037 140	011073122115094051052 .076 .035 .030 .000144	.004 .007 149 137 120 083 074 110 136 07 110 136	0 E G 0 25 45 60 70 75 80 85 90 105 110 125 155 160 205 225 240 250 255 260 275 280
100 105 120 120 135 180 205 240 255 240 255 265 2765 2765 2765 285 285					CP .		0.60	034037068118042039 .014 .060 .095 .034 .037140130	011073122115054051052 .076 .035 .030 .000144	.004 .007 149 137 120 .003 074 109 110 136 .107 .110 .107	DEG 0 25 45 60 70 79 80 85 90 105 110 120 135 155 205 205 250 255 260 267 275 280 290

ORIGINAL PAGE IS OF PUOR QUALITY

TABLE 2 .- Continued

		ALPHA = 14.62+	PHI = 45	.0, 8007/	wING/TAIL	./NO DEFLEC	*10NS		
THE TA DE G	0.10	0.20 0.30	0.40	CP AT X/L+ 0.50	0.60	0.70	0.85	0.95	THE TA
C 25 45						134	110	117 078	0 25 45
60						670	103		60
70								162	70
75						110	134	151 129	75 80
80 85						107	133	106	85
90								097	90
95						073	069	118	95
100 105						035	063	151 130	100 105
110						•••	•••	165	110
120						-040	038		120
135								.162	135 155
155 180						.106	.126	.163	190
205								.167	205
225						•••			225
240 250						.116	.103	.004	240 250
255						.098	.102	014	255
260								037	260
265						.103	.056	012 .021	265 270
270 275						155	154	-040	275
200								.028	280
285						152	136	.015	285
290 300						142	145	.017	290 300
315						- 4242	••••		315
335								-•092	335
		ALPHA = 19.61,	PHI = 4	5.0, BODY	/wing/tai	L/NO DEFLE	CTIONS		
THE TA DE G	0.10	0.20 ù.30	0.40	CP AT X/L- 0.50	0.66	0.70	0.85	0.95	THE TA DEG
0 25						142	135	-,147 -,152	0 25
45 60						114	159		45 60
70						•••		130	70
75						124	143	132	75
80 85						105	139	124 112	80 85
90							•==	115	90
95						079	064	142	95
100 105						022	657	165 148	100 105
110						***	•••	173	110
120						.075	014		120
135 155								.241	135 155
180						.166	.190	.234	180
205								.251	205
225						.195	.198		225 240
24G 250								.076	250
255						.182	.193	.046	235
260 265						.220	.143	006 035	260 265
270								018	270
275						145	132	019	275
28C 285						164	129	.015 .046	280 285
290								.041	290
300						157	125		300
315									315

TABLE 2.- Continued

(c) Continued

ALPHA . 24.59, PHI . 45.0, 800Y/WING/TAIL/ND DEFLECTIONS

ORIGINAL PAGE to OF POOR QUALITY

THE TA DEG	0.16	0.20	0.30	0.40	CP AT X/L=	0.60	0.70	0.85	0.95	THETA DEG
	0.10	0.20	0.30	0.40	0.70	0.00				
0 25							161	139	172 168	0 25
45 60							171	172		45 60
70									135	70
75							145	177	138	75
8C 85							109	169	128 142	80 85
90							••••	- 6 2 0 4	165	90
95							075	048	168	95
100									179	100
105 116							.000	041	155 184	105 110
120							.120	.016	-1104	120
135									227	135
155 180							.238	.270	.337 .311	155 180
205									.345	205
225										225
240							.289	.310		240
25C 255							.241	.305	.166 .128	250 255
260							•••	1307	.065	590
265							.367	.235	.011	265
270									.033	270
275 280							137	141	.040 .030	275 280
285							177	145	.029	285
290									.044	290
300 315							172	148		300 315
335									152	335
		ALPHA	• 4.43,	PHI • 67.		/wing/tail	./NO DEFLFO	CTIONS		
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L-	0.40	0.70			THETA
	0010	0000	0.70	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0 25							017	.003	.024 .026	0 25
45									•020	45
60							022	054		60
70 75							- 033	- 631	120	70
80							037	671	099 083	75 80
85							061	062	073	85
90									054	90
95 100							021	047	070 084	95 100
105							037	049	085	105
110									119	110
120 135							012	066		120
155									.051	135 155
180							-015	.026	.053	180
205 225									.042	205
240							.001	014		225 240
250									047	250
255 260							017	033	027	255
260 265							019	041	.009	265 265
270									.045	270
275							075	086	.029	275
280 285							052	067	.008 009	280
540							072	007		285
300									030	240
315							029	033	056	290 300
335							029	033	.014	

ORIGINAL TOTAL 13

(c) Continued

ALPHA . 9.44, PHI . 67.5, 808Y/WIMG/TAIL/NO DEFLECTIONS

THETA					CP AT X/L-					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEE
0							033	012	005	C
25									.010	25
45 60							032	062		45 60
70							1032	- 1002	155	70
75							043	085	133	75
8C 85							072	082	112 118	80 85
90							072	002	104	90
95							038	074	085	95
100							- 040	- 071	107	100
105 110							060	071	115 133	105 110
120							019	080		120
135										135
155 100							.022	.036	.060 .063	155 180
205									.060	205
225										225
240 250							.070	.023	023	240 250
255							.011	.004	038	255
260									007	260
265 270							.023	020	.039 .103	265 270
270 275							099	125	.111	275
200									.087	280
285							103	103	.036	285
290 300							063	040	017	2 9 0 300
315							******	****		315
335									020	335
		ALPHA	• 14.42,	PHI • 67	.5, BODY.					
THETA						/wING/TAI	./NO DEFLEC	TIONS		
086	0.10				CP AT X/L=	/wing/tai:	./NO DEFLEC	TIONS		THETA
0		0.20	0.30	0.40	CP AT 1/L= 0.50	O.60	./NO DEFLEC	0.85	0.05	THETA DEG
25 45		0.20	0.30	0.40					060	0
60		0.20	0.30	0.40			0.70	0.85		0 E G 2 S
70 75		0.20	0.30	0.40			0.70	0.85	060	0
# 7		0.20	0.30	0.40			0.70 068 058	0.85 059 106	060 035 157	0 E G 2 5 4 5 6 0 7 0
80		0.20	0.30	0.40			0.70 068	0.85 059	060 035 157 152	0 6 0 2 5 4 5 6 0 7 0 7 5
80 85		0.20	0.30	0.40			0.70 068 058	0.85 059 106	060 035 157 152 136 139	0 E G 2 5 4 5 6 0 7 0
85 90		0.20	0.30	0.40			0.70 068 058 068 059	0.85 059 106 699 096	060 035 157 152 136 139	0 E 6 0 25 45 60 70 75 60 85
85 90 95		0.20	0.30	0.40			0.70 068 058 068	0.85 059 106 699	060 035 157 152 136 139 132	0 E G
85 90 95 100 105		V•2U	0.30	0.40			0.70 068 058 068 059	0.85 059 106 699 096	060 035 157 152 136 139 132 118 135	0 E G
85 90 95 100 105 110		V•2U	0.30	0.40			0.70 068 058 068 059 068	0.85 059 106 699 096 098	060 035 157 152 136 139 132 118	0 E 6 0 2 5 4 5 6 0 7 0 7 5 8 0 8 5 9 9 9 5 1 0 0 1 0 5 1 1 0 5 1 1 0
85 90 95 100 105 110		V•2U	0.30	0.40			0.70 068 058 068 059 068	0.85 059 106 699 096	060 035 157 152 136 139 132 118 135	0E6 0 25 45 60 70 75 80 85 92 95 100 105 110
85 90 95 100 105 110 120 135		V•2U	0.30	0.40			0.70 068 058 068 059 068 083	0.85 059 106 699 096 098 095	060 035 157 152 136 139 132 118 135 142 104	0 E 6 0 25 45 60 70 75 85 90 95 100 105 110 120
85 90 95 100 105 110 120 135 155		0.20	0.30	0.40			0.70 068 058 068 059 068	0.85 059 106 699 096 098	060 035 157 152 136 139 135 142 164	0 E 6 0 25 45 60 70 75 60 85 90 95 100 105 110 120 135 155
85 90 95 100 105 110 120 135		V•2U	0.30	0.40			0.70 068 058 068 059 068 083	0.85 059 106 699 096 098 095	060 035 157 152 136 139 132 118 135 142 104	0E6 0 25 45 60 70 75 80 85 92 95 100 105 110 120 135 155 180 205
85 90 95 100 105 110 120 135 155 160 205 240		V•2U	0.30	0.40			0.70 068 058 068 059 068 083	0.85 059 106 699 096 098 095	060 035 157 152 136 139 135 142 164	0 E 6 0 25 45 60 70 75 85 90 95 100 105 110 120 133 155 180 205 225
85 90 95 100 105 110 120 135 155 160 205 225 240 250		V•2U	0.30	0.40			0.70 068 058 068 059 068 023 025	0.85 059 106 699 096 098 095 090	060 035 157 152 136 139 132 118 135 142 164	0E6 0 25 45 60 70 75 80 85 92 95 100 105 110 120 135 155 180 225 240 250
85 90 95 100 105 110 120 135 155 160 205 240		V•2U	0.30	0.40			0.70 068 058 068 059 068 025	0.85 059 106 699 096 098 095 090	060 035 157 152 136 139 132 118 142 164 .069 .073 .082	0 E 6 0 2 5 4 5 6 0 7 0 7 5 6 0 8 5 9 9 9 9 5 1 0 0 1 2 0 1 2 5 1 8 0 2 5 5 2 5 0 2 5 5 5 6 6 0 1 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
85 90 95 100 105 110 120 135 160 205 225 240 250 250 260		V•2U	0.30	0.40			0.70 068 058 068 059 068 023 025	0.85 059 106 699 096 098 095 090	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 2 5 4 5 6 0 7 0 7 5 6 0 8 5 9 7 1 0 0 1 0 5 1 1 2 0 1 3 5 1 2 5 5 2 4 0 2 5 5 2 6 5 5 6 5 6 5 6 6 5 6 6 5 6 6 5 6
85 90 95 100 105 110 120 135 155 160 205 225 240 250 250 263		V•2U	0.30	0.40			0.70068058068059068025 .032 .050 .056	0.85 059 106 699 096 098 095 090 .052	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 2 5 4 5 6 0 7 0 7 5 8 0 8 5 9 9 9 5 1 1 0 0 1 2 0 1 3 5 1 1 5 5 1 2 0 5 2 2 5 2 4 0 2 5 5 2 6 0 2 6 5 2 7 0
85 90 95 100 105 110 120 135 160 205 225 240 250 250 260 270 275 260		V•2U	0.30	0.40			0.70 068 058 059 059 068 083 025	0.85 059 106 699 096 095 090 .052	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 180 205 240 250 250 265 270 275
85 90 95 100 105 110 120 135 155 160 205 225 240 250 250 263 270 275 280		V•2U	0.30	0.40			0.70068058068059068025 .032 .050 .056	0.85 059 106 699 096 098 095 090 .052	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 2 5 4 5 6 0 7 0 7 5 8 5 9 9 9 9 9 1 0 0 1 0 5 1 1 0 0 1 2 0 5 2 2 5 2 4 0 2 5 5 2 6 6 5 2 7 0 2 7 5 2 8 0 2 8 5
85 90 95 100 105 110 120 135 180 205 225 240 250 250 263 275 260 275 285		V•2U	0.30	0.40			0.70068058068059068025 .032 .050 .056 .094085113	0.85 059 106 699 098 095 090 .052 .068 .053 .019 130	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E G
85 90 95 100 105 110 120 135 180 205 225 240 250 253 270 263 270 275 280 285 290 300		V•2U	0.30	0.40			0.70068058068059068025025 .032 .050 .056 .094085	0.85 059 106 699 096 095 090 .052 .068 .053 .019	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 2 5 4 5 6 0 7 0 7 5 8 5 8 5 9 9 9 9 10 0 12 0 12 0 12 0 12 0 12 0 1
85 90 95 100 105 110 120 135 160 205 240 250 250 260 265 270 275 280 285 280 285		V•2U	0.30	0.40			0.70068058068059068025 .032 .050 .056 .094085113	0.85 059 106 699 098 095 090 .052 .068 .053 .019 130	060 035 157 152 136 139 132 118 135 142 164 .069 .073 .082	0 E 6 0 25 45 60 70 75 60 85 90 100 105 1100 120 135 155 180 205 225 240 250 255 270 275 280 285 290 300

		ALPHA	• 19.44,	PHI = 6	7.5,	800Y/	wing/tal	I./NO DEFLE	CTIONS		
THE TA DEG	0.10	0.20	0.30	0.4C		AT X/L= 0.50	0.60	0.70	0.05	0.95	THETA DEG
0 25 45								114	115	144 - 117	0 25
60								103	130		45 60
70 75								116	122	159 152	70 75
80										138	60
85 90								074	132	142 145	85 90
95								072	108	140	95
100 105								096	102	160 152	100
110								- 50 70		177	105 110
120 135								-•026	093		120
155										.079	135 155
180 205								•055	.081	.094	100
225										-117	205 225
240 250								.099	-133		240
255								•122	.123	.161 .102	250 255
260										.025	260
265 270								-183	.677	.077 .171	26) 270
275								060	121	.245	275
280 285								112	- 106	.255 .149	280
290								-+116	105	.256	285 290
300 315								125	109		300
335										115	315 335
		ALPHA	• 24.44.	PHE = 6	7.5,	80DY/	WING/TAE	L/ND DEFLE	CTIONS		
THE TA DEG	0.10	0.20	0.30	0.40		T X/L-	0.60	0.70	0.85	0.95	THE TA
0 25								139	234	158 150	0 25
65 60								127	150		45 60
70								-4161	170	165	70
75 AC								119	137	161 145	75
85								133	135	157	80 85
90 95								088	115	161 156	90 95
100										171	100
10' 11C								097	107	155	105
120								015	086	182	110 120
135 155										107	135
180								.088	.122	.107 .125	155 180
205 225										.174	205
240								.159	.209		225 240
250 255										•274	250
26C								• 202	.209	.219 .103	255 260
265 270								.286	.150	.191	265
275								024	100	.327 .419	270 275
280 285										.425	280
290								106	087	.28) .462	285 290
300 315								124	093	- ·-	300
335										110	315 335

ORIGINAL PAGE TO OF POOR QUALITY

(c) Continued

ALPHA = -5.52, PHI = 90.0, BODY/WING/TAIL/NO DEFLECTIONS

			,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		LING DEFEE	. 1 1 0 1 3		
THE TA DE G	0.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	THE TA DEG
0 25 45							065	-013	.033	0 25
6C 70							013	028	•••	45 60
75 80							031	054	054 025	70 75
85							041	063	.010 .023	80 85
90 95							038	060	.050	90 95
100 105							030	043	.008 010	100 100
110 120							014	2 5	060	110 120
135 155									•029	135 155
180 205							.004	•012	.037 .030	180 205
225 240							016	064		225 240
250 255							~.033	054	102 096	250 255
260 265							035	052	081 065	260 265
270 275							033	050	046 061	270 275
280 2 85							033	055	075 088	280 285
290 300							015	060	111	290 300
315 335							****	****	.036	315 335
THETA DEG	0.10	AL PHA	•71, 0.30	PHI = 90	0.0, 800Y CP AT X/L= 0.50		L/NO DEFLEC	CT 10NS	0.95	TMETA Deg
0	0110	0.20	0.50	0.40	0.70	0.00	004	.012	.041	0
25 45									.034	25 45
60 70							013	044	086	60 70
75 80							033	059	063 042	75 eo
85 90							043	054	033 019	85 90
95 160							040	052	027 050	95 100
105 110							032	055	055 080	105 110
120 135							014	045		120 135
155 160							.007	.011	.032	155 180
205 22:									.027	205 225
240 250							011	042	094	240 250
255 260							030	054	060 042	255 260
262 270							040	054	027 013	265 270
275 280							039	053	025 040	275 280
285 290							031	05t	054 079	285 290
300 315							012	040		300 315
335									.031	335

TABLE 2.- Continued

				(c) C	ontinue	ed.				
				, , , ,		- -		ORIGIN OF PO	VAL PAG OR QUA	FILA R 🔅
		ALPHA =	4.30.	PHI • 90.0,	B00 Y /	WING/TAIL	./NO DEFLEC		_	•
THETA				CP	AT X/L-					THETA
DF 6	0.10	0.50	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0 25 45							010	.012	.032 .039	0 25 45
60 70							018	067	121	60 70
75							035	059	096	75
80 85							037	054	076 071	60 85
90 95							034	053	057 064	90 95
100									085	100
105 110							036	057	084 117	105 110
120							014	008		120 135
135 155									.035	155
180 205							.001	.010	.036	1 PO 205
225									****	225
240 250							017	024	067	240 250
255 260							033	048	024 .010	255 260
265							040	061	.032	265
270 275							038	061	.038 .032	270 275
280 285							034	049	006	280 285
290									049	290
300 315							017	022		300 315
335									.029	335
THE TA DE G	0.10	ALPHA =	9.30,	РНІ = 90.0 С 0.40	, 800 ₹ P at X/L= 0.50		IL/NO DEFLI 0.70	CTIONS 0.85	0.95	THET1
0							021	•002	.013 .026	0 25
25 45									•026	45
60 70							031	090	139	60 70
75							045	074	135	75
80 8 5							036	067	111 101	80 85
90 95							033	068	084 095	90 95
100									125	100
105 110							046	073	121 140	105 110
120							033	690		120 135
135 155									•025	155
180 205							011	.001	.016	1 80 205
225 240							028	014		225 240
250 255							037	041	024 006	25G 255
260									.031	260
265 270							027	068	.081 .097	265 270
275 280							026	069	.087 .051	275 280
285							041	042	.001	285
290 300							030	014	019	290 300
315 335									•006	315 335
237									••••	

ORIGINAL FACEL TO OF POOR QUALITY

		ALPHA .	14.30,	6 • 1Hd	0.0.	8007/4	ING/TAIL	./NO DEFLEC	TIONS		
THETA . DEG	0.16	0.20	0.30	0.40	CP	AT X/L . 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25 45								045	019	018 000	0 25 45
60								053	114		60
70 75								059	- 003	~.158 ~.153	70 75
ย้ง								074	093	128	60
85								045	081	124	85
90 95								042	082	115 118	90 95
100										-,143	100
105								060	091	130	105
110 120								054	114	161	110 120
135											135
155 180								035	021	006 016	155 180
205								-1033	022	018	205
225											225
240 250								040	015	.083	240 250
255								021	G27	.019	255
265 265								.012	- 654	.058	263 265
270								.012	056	.138	270
275								.014	057	.149	275
285 285								026	030	.083	280 285
296										.088	290
300 315								042	017		300
335										024	315 335
		ALPHA	• 19.30,	PH1 =	90.0	, B00Y	rwing/TA	IL/NO DEFLE	ECTIONS		
THETA DEG	0.10	0.20	0.30	0.40		P AT X/L= 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25								064	043	053 055	0 25 45
45 60								098	137		60
70										165	70
75 80								+•072	128	165 143	75 80
85								065	103	147	85
90 95								-,060	099	143 142	90 95
100										160	100
105								-,069	119	146 170	105 116
110 120								097	135	****	170
135										064	135 155
155 180								057	044	047	180
205										016	205 225
225 240								625	•009		240
250										.246	250
255 260								.011	•010	.129	255 260
265								.067	021	.241	265
270 275								.071	024	.305 .245	270 275
280										.154	280
285 290								•006	.005	.111 .252	285 290
300								027	.005		300
315 335										028	315 335

ORIGINAL PAGE 18 OF POOR QUALITY

TABLE 2.- Continued

		ALPHA	= 24.31,	PHI = Q	0.0,	BQ0Y/	wing/tal	L/NO DEFLE	CTIONS		
THE TA DE G	6.16	0.2G	0.30	0.40	CP	AT X/L> 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25 45								~.060	036	054 055	0 25
60								120	147		45 60
70 75								- 004	- 120	175	70
60								096	139	173 151	75 80
85 90								091	135	157	85
95								081	126	154 153	90 95
100										167	100
105 110								089	133	148 179	105 116
120								120	144	••••	150
135 155										065	135
186								051	C36	048	155 180
205 225										003	205
240								005	.043		225 240
250										.432	250
255 260								-048	.056	.294 .219	255 260
265								.127	.024	.384	265
270 275								.136	.023	.428 .390	270 275
280								• • • • • • • • • • • • • • • • • • • •	•023	.243	260
285 290								.044	.052	-268	285
300								006	.040	.449	290 300
315 335										023	315 335
Tur v.		ALPHA =	-5.01,	PH1 = 0			ING/TAIL	PITCH DEF	.ECTIAN		TUETA
THETA DEG	0.10	0.20	0.30	0.46		AT X/L= 0.50	0,60	0.70	0.85	0.95	DEG
0 25 45								•030	.047	.384 .319	0 25 45
60								•022	030		60
70 75								011	024	-,058 -,111	70 75
80								•011	-1014	110	60
85 90								•004	025	104 071	85 90
95								113	072	069	95
100 105								- 040	- 681	~.065 ~.038	100 105
110								060	091	.059	110
120								034	059		120
135 155										136	135 155
180								009	.001	925	180
205 225										170	205 2 <i>2</i> 5
740								032	054		240
250 255								062	096	.249	250
260										-,320	
265 270										262	255 260
275								111	08P	962 951	255 260 265
280								111 009	08P 025	962 951 052 065	255 260 265 270 275
								009	025	962 951 052 065 087	255 260 265 270 275 280
285 290								009	025	962 951 052 065	255 260 265 270 275
285								009	025	962 051 052 065 087 091	255 260 265 270 275 280 285

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		AL PHA .	.01,	PHI - 0	.O. B	DDY/WING/TA	IL/PITCH DEF	LECTION		
THETA DEG	0.10	0.20	0.30	0.40	CP AT		0.70	0.85	0.95	THETA DEG
			0030	0.40	•	0.00		0.03	0.43	DEG
0 25 45							006	.010	.279 .241	0 25 45
60							012	044		60
70 75							032	044	035	70
60							-•032	066	083 105	75 80
85 90							042	056	128	85
95							040	050	131 130	90 95
100									120	100
105 110							031	059	-,059 .012	105 110
120							010	040	1010	120
135 1 55									- 122	135
180							.010	.013	133 010	155 180
205									164	205
225 240							011	044		225 240
250									.008	250
255 260							030	056	060 106	255 260
265							043	054	124	265
270 275									109	270
280							038	053	114 111	275 280
285							032	056	092	285
290 300							014	042	045	290 300
315								- • • • •		315
335									.240	335
		ALPHA =	4.98,	PHI • ().0, (30DY/wING/TA	IL/PITCH DEF	LECTION		
THETA			4.98,	PHI ● ()+0+ (CP AT		IL/PITCH DEF	LECTION		THETA
DEG	0.10	ALPHA =	4.98, 0.30	PHI • (X/L•	0.70	0.85	0.95	DEG
0 0 25	0.10			-	CP AT	X/L•			0.95 .244 .200	DEG 0 25
0 E G 0 25 45	0.10			-	CP AT	X/L•	0.70 024	0.85	.244	DEG 0 25 45
0	0.10			-	CP AT	X/L•	0.70 024 034	0.85 002 060	.244 .200	DEG 0 25 45 60 70
0	0.10			-	CP AT	X/L•	0.70 024	0.85	.244 .200 041 088	0 25 45 60 70 75
0EG 0 25 45 60 70 75 80 85	0.10			-	CP AT	X/L•	0.70 024 034	0.85 002 060	.244 .200	DEG 0 25 45 60 70
DEG 0 25 45 60 70 75 80 85 90	0.10			-	CP AT	X/L•	0.70 024 034 060 121	0.85 002 060 100	.244 .200 041 088 118 133	DEG 0 25 45 60 70 75 80 85 90
0EG 0 25 45 60 70 75 80 85	0.10			-	CP AT	X/L•	0.70 024 034 060	0.85 002 060 100	.244 .200 041 088 116 133 131	DEG 0 25 45 60 70 75 80 85
DEG 0 25 45 60 70 75 80 85 90 95 100	0.10			-	CP AT	X/L•	0.70 024 034 060 121	0.85 002 060 100	.244 .200 041 008 116 133 131 134 132	DEG 0 25 45 60 70 75 80 85 90 95
DEG 0 25 45 60 70 75 80 85 90 95 100 105	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002 023	0.85 002 060 100 089 023	.244 .200 041 088 116 133 131 134	DEG 0 25 45 60 70 75 80 85 90 95 100 105
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002	0.85 002 060 100 089 023	.244 .200 041 008 118 133 131 134 081	DEG 0 25 45 60 70 75 80 85 90 95 100 105 110
0 C C C C C C C C C C C C C C C C C C C	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002 023	0.85 002 060 100 089 023 020	.244 .200 041 000 116 133 131 134 132 028	DEG 0 25 45 60 70 75 80 95 90 95 100 105 110 120 135
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002 023	0.85 002 060 100 089 023	.244 .200 041 008 118 133 131 134 081	DEG 0 25 45 60 70 75 80 85 90 95 100 105 110
DEG 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002 023 .016	0.85 002 060 100 089 023 020 029	041 088 118 133 131 134 132 081 028	DEG 0 25 45 60 75 80 85 90 95 100 120 135 155 180 205 225
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205 225 240 250	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038	0.85 002 060 100 089 023 020	041 088 118 133 131 134 132 081 028	0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205
0 C C C C C C C C C C C C C C C C C C C	0.10			-	CP AT	X/L•	0.70 024 034 060 121 002 023 .016	0.85 002 060 100 089 023 020 029	.244 .200 041 000 118 133 131 134 132 028 106 .031 156	DEG 0 25 45 60 70 75 80 85 90 95 100 120 135 180 205 225 240 255
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205 225 240 250	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015	0.85 002 060 100 089 023 020 029 .049 030	.244 .200 041 008 118 133 131 134 132 028 106 .031 156	0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 159 180 205 225 240 250
0 C C C C C C C C C C C C C C C C C C C	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015	0.85002060100089023020029049030025029	.244 .200 041 008 118 133 131 134 028 028 106 .031 156	DEG 0 25 45 60 70 75 80 85 90 95 100 120 135 155 180 205 225 240 255 260 255 260 265 270
DEG 0 25 45 60 77 75 80 85 90 95 100 105 120 135 155 160 205 225 240 250 260 265	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015	0.85 002 060 100 089 023 020 029 .049 030	.244 .200 041 008 118 133 131 134 028 028 106 .031 156	0 25 45 45 60 70 75 80 85 90 100 105 110 120 135 155 180 205 240 250 250 260 265 275
DEG 0 25 45 60 770 75 80 85 90 95 100 120 135 155 180 205 225 240 255 260 265 270 275 280	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015	0.85002060100089023020029049030025029	041008118133131134132081028106031156038095104103099109101072	0 EG 0 25 45 60 70 75 80 85 90 95 110 120 135 155 180 205 225 240 255 260 275 260 275 280 285
0EG 025 45 60 70 75 80 85 90 100 110 120 135 155 180 205 225 240 250 255 270 275 280 285 290	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015026112057	0.85002060100089023020029049030025029089099	041088118133131134132081028106031156	0 25 45 45 60 70 75 80 85 90 100 105 110 120 135 155 120 205 240 250 250 260 265 270 275 280 285 290
DEG 0 25 45 60 770 75 80 85 90 95 100 120 135 155 180 205 225 240 255 260 265 270 275 280	0.10			-	CP AT	X/L•	0.70024034060121002023 .016 .038 .015015026112	0.85002060100089023020029 .049030025029	041008118133131134132081028106031156038095104103099109101072	DEG 0 25 45 60 70 75 80 85 90 105 110 120 135 155 240 255 240 255 260 275 270 275 280 285

ORIGINAL PAGE IS OF POOR QUALITY

		ALPHA =	10.02,	,0.0 • IHQ	800Y/W	ING/TAIL/	PITCH DEFL	ECTION		
THE TA DEG	0.10	0.20	0.30	0.40	P AT X/L=	0.60	0.70	0.85	0.95	THETA DEG
0	0110	0120	••••	••••	••••		042	015	.250	0
25							***	****	.184	25
45 60							065	084		45 60
70							- 147	- 160	156	70
75 60							147	160	162 147	75 80
85 90							146	162	168 167	85 90
95							.017	.006	155	95
100 105							•020	.011	139 095	100 105
110									054	110
120 135							.068	. 601		120 135
155									071	155
180 205							.094	.107	.086 136	180 205
225							04.5	• 002		225
240 250							.065	.002	066	240 250
255 260							• 020	.006	113 137	255 260
265							.007	003	151	265
270 275							146	163	-,143 -,160	270 275
280									158	280
285 290							145	154	155 148	285 290
300							061	080		300
315 335									.146	315 335
		ALPHA •	14.99,	PH1 • 0.0	, BODY/	WING/TAIL	/PITCH DEF	LECTION		
THETA DEG	0.10	0.20	0.30	0.40	CP AT X/L=	0.60	0.70	0.85	0.95	THETA DFG
0	••••						076	650	026	0
25 45									.087	25 45
60							160	163		60
70 75							160	171	166 171	76 75
80									158	80
85 90							166	175	172 165	85 90
95 100							.047	.051	157 127	95 100
105							.070	.061	090	105
110 120							.134	.055	057	110 120
135 155									031	135 155
180							.169	.190	.157	180
205 225									106	205 225
240							•132	.053	075	240 250
250 255							.069	.055	112	255
260 265							.042	.042	139 164	260 265
270									157	270
275 280							164	172	169 170	275 280
285 2 9 0							160	168	167 162	285 2 9 0
300							156	158		300
315 335									.087	315 335

TABLE 2.- Continued

(c) Continued	ORIGINAL PAGE SO OF POOR QUALITY
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		ALPHA =	19.99,	PHI = 0	.O, 80DY	'WING/TAIL	/PITCH DEF	LECTION		
THE TA OF G	0.10	0.20	0.30	0.40	CP AT X/L- 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25							106	080	063 008	0 25
45 60							174	179		45 60
70 75							170	179	161 164	70 75
80									158	60
85 90							188	100	170 167	85 90
95 100							.091	.108	146 108	95 100
105							.134	.128	074	105
110 120 135							•221	.121	051	110 120
155									001	135 155
180 205 225							. 266	.289	.231 058	1 80 205
240							.221	-119		225 240
250 255							.135	•121	070 099	250 255
260 265									126	260
270							.085	.100	156 163	265 270
275 280							185	176	169 167	275 280
265 290							172	175	160	285
300 315							172	172	150	290 300 315
335									015	335
THETA		ALPHA =	25.00,	PHI = 0			/PITCH DEF	ECTION		*
THETA DEG	G.10	0.20	0.30	0.40	CP AT X/L= 0.50	0.60	0.70	0.85	0.95	DEG
0 25 45							135	116	089	0 25 45
60							180	179		60
70 75							177	176	154 154	70 75
85 85							198	177	154 167	80 85
90 95									160	90 95
100							.150	.183	127 086	100
105 110							.210	.215	052 026	105 110
120 135							.322	.200		120 135
155 180							.380	• 405	.068 .301	155
205 225							• 500	• 405	004	180 205
240 250							.322	. 200	053	225 240 250
255							.214	.210	079	255
260 265							.144	.178	104 140	260 265
270 275							193	170	161 163	270 275
280 285									160	280
290							180	172	151 150	285 290
300 315 335							178	~. 171	079	300 315 335

TABLE 2.- Continued

ORIGINAL PAGE IS OF POOR QUALITY

								L/YAJ DEFLI			
THETA DEG	0.10	0.20	0.30	0.40	CP	AT X/L- 0.50	0.60	0.70	0.85	0.95	THET!
0 -5 45								-034	.046	.220 118	0 25 45
60								•022	027		60
70 75								009	.007	.114	70 75
80 85								•005	006	.191	80 85
90 95								010	.010	.222	90 95
100 105								009	.011	.178 .177	100 105
110 120								032	.029	.168	110 120
135 155 180								009	.019	105 .142	135 155 190
205 225										.202	205 225
240 250								030	054	142	240 2 5 0
255 260								062	097	143 132	255 260
265 270								-,110	094	119 095	265 270
275 280								008	025	109 123	275 280
290 285								013	024	145 165	285 290
300 315								.019	030		300 315
335										.253	335
THETA		ALPHA :	.03,	PHI •	0.O, CP		wING/TAI	L/YAW DEFLI	ECTION		THETA
THETA DEG	0.10	А L РНА .	0.30	PHI •		8 OD Y / AT X/L = 0.50	WING/TAE 0.60	L/YAW DEFLI	ECTION 0.85	0.95	THE TA
DE G 0 25	0.10					AT X/L=				0.95 .172 134	
DEG 0 25 45 60	0.10					AT X/L=		0.70	0.85	.172	0 E G 0 25
DEG 0 25 45 60 70 75	0.10					AT X/L=		0.70	0.85	.172 134 .291	0 E G 2 5 4 5 6 0
DEG 0 25 45 60 70 75 80 85	0.10					AT X/L=		0.70 .001 011	0.85 .011 .061	.172 134 .291 .348 .367	0EG 25 45 60 70 75
DEG 0 25 45 60 70 75 80 85 90	0.10					AT X/L=		0.70 .001 011 631	0.85 .011 .061	.172 134 .291 .348 .367 .371 .339	0 E G 25 45 60 70 75 80 85
DEG 0 25 45 60 70 75 80 85 90 95 100	0.10					AT X/L=		0.70 .001 011 631	0.85 .011 .061 .076	.172 134 .291 .348 .367 .371 .339 .308 .276	0 E G 0 25 45 60 70 75 80 85 90 95
DEG 0 25 45 66 70 75 80 85 90 100 105 110	0.10					AT X/L=		0.70 .001 011 631 039	0.85 .011 .061 .076 .C77	.172 134 .291 .348 .367 .371 .339 .308	0 E G 25 45 60 70 75 80 85 95 100 105 110
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155	0.10					AT X/L=		0.70 .001 011 631 039 031 027	0.85 .011 .061 .076 .C77 .053	.172 134 .291 .348 .367 .371 .339 .308 .276 .266 .245	0EG 0 25 45 60 70 75 80 85 90 95 100 120 120
DEG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205	0.10					AT X/L=		0.70 .001 011 631 039 031	0.85 .011 .061 .076 .077 .053	.172 134 .291 .348 .367 .371 .339 .308 .276 .266	0EG 0 25 45 60 70 75 80 90 91 100 120 125 155 180 205
DEG 0 29 45 66 70 75 86 65 90 105 110 120 135 155 180 205 225 246	0.10					AT X/L=		0.70 .001 011 631 039 031 027	0.85 .011 .061 .076 .C77 .053	.172 134 .291 .348 .367 .371 .339 .308 .276 .268 .245	0EG 0 25 45 60 70 79 80 85 90 95 100 103 110 120 135
DEG 0 25 45 60 70 75 80 90 95 100 105 110 120 135 155 180 205 225	0.10					AT X/L=		0.70 .001 011 031 039 031 027 010	0.85 .011 .061 .076 .C77 .053 .049 .029	.172 134 .291 .348 .367 .371 .339 .308 .276 .266 .245	0EG 0 25 45 60 70 75 85 90 95 100 103 113 120 120 120 205 225
DEG 0 25 45 66 70 75 86 85 90 95 100 105 110 120 125 155 160 205 2250 2250 2250 2260	0.10					AT X/L=		0.70 .001 011 631 039 031 027 010	0.85 .011 .061 .076 .077 .053 .049 .029	.172134 .291 .348 .367 .371 .339 .308 .276 .268 .245 083 .152 .170	0EG 0 25 45 60 70 75 80 85 90 90 100 110 120 123 155 180 205 225 240 255
DEG 0 29 45 66 70 75 86 85 90 100 105 110 120 135 155 160 205 225 246 250 260 265 275	0.10					AT X/L=		0.70 .001 011 631 039 031 027 010	0.85 .011 .061 .076 .077 .053 .049 .029	.172134 .291 .348 .307 .371 .339 .308 .276 .268 .245 063 .152 .170 138136126	0EG 0 25 45 60 70 75 80 85 90 95 100 103 110 120 135 155 180 205 225 240 250 255
DEG 25 45 60 70 75 85 90 95 100 105 115 115 120 125 225 246 255 266 270 275 285	0.10					AT X/L=		0.70 .001 011 031 039 031 027 010 .009 010	0.85 .011 .061 .076 .077 .053 .049 .029 .013	.172134 .201 .348 .367 .371 .339 .308 .276 .268 .245 083 .152 .170 138136116101112125149	0EG 0 25 45 60 70 75 85 90 100 103 110 205 225 240 250 250 265 275
DEG 0 25 45 66 70 75 85 90 95 100 105 110 120 135 155 160 205 225 246 250 250 265 270 275 286	0.10					AT X/L=		0.70 .001011631039031027010 .009010030041037	0.85 .011 .061 .076 .077 .053 .049 .029 .013044055053	.172134 .291 .348 .367 .371 .339 .308 .276 .268 .245 083 .152 .170 138136116101112	25 45 60 75 80 85 90 95 103 110 125 125 240 255 260 255 260 275 275 285

TABLE 2.- Continued

ORIGINAL PAGE 59 OF POOR QUALITY

		ALPHA •	5.01,	PHI •	0.0,	8004/	wing/tai	L/YAW DEFLI	CTION		
THETA DEG	0.10	0.20	0.30	0.40	CP	AT X/L= 0.50	0.60	0.70	0.85	0.95	THETA DEG
0 25 45								050	.018	.146 144	0 25 45
60								033	.029		60
70										•112	70
75 60								009	•012	.109 .138	75 80
85								012	.011	.193	65
90										.245	90
95								.003	.001	.284 .234	95 100
100 105								011	.022	.198	105
110										.164	110
120								.018	025		120
135 155										090	135 155
180								.039	.050	.202	180
205										.259	205
225 240								.017	030		225 240
250								•••	****	141	250
255								013	024	139	255
260								- 025	A20	126 116	260 26 3
265 270								025	029	093	270
275								111	090	112	275
200									- 000	~.128	280
285 290								058	099	147 165	285 290
300								032	052	V107	300
315											315
335										.197	335
		44 0444		0 44 -		0.00¥;	~ 1 N.C 4 T A T	L/YAW DEFLE	:CT 100		
THETA		ALPHA	10.01,	PHI -	.0.0	AT X/L=	#1N0/1#1	L/IAW DEFE	CIION		THETA
DEG	0.10	າ•20	0.30	0.40	•	0.50	0.60	0.70	0.85	0.95	DEG
0 23 45								039	•012	-156 109	0 25 45
60								064	053		60
70										.160	70
75 80								061	057	.120 .023	75 80
85								059	054	027	85
90										038	90
95 100								.023	.010	019 047	95 100
105								.023	.016	048	105
110										040	110
120								.070	.004		120 135
135 155										067	155
180								.095	.109	.287	180
205 225										.375	205 225
240								.066	.001		240
250										151	250
255 260								•020	• 00P	151 148	255 260
265								.008	002	148	265
270										136	270
275 380								146	162	152 156	275 280
280 285								145	154	166	205
290								-			
300										170	290
315								059	078	170	290 300 315

TABLE 2. - Continued

ORIGINAL PAGE IS OF POOR QUALITY

(c) Continued

ALPHA = 15.02, PHI = 7.0, BODY/WING/TAIL/YAW DEFLECTION

THETA					CO 47 M41 -					
DEG	0.10	0.20	0.30	0.40	CP AT X/L=	0.60	0.70	0.85	0.95	THETA DEG
0 25							073	045	017 136	0 25
45 60							110	~.104		45 60
70 75									090	70
80							102	103	017 .018	75 80
85 90							084	097	014	85
45							.052	.056	014 .005	90 95
100 105							.073	.067	.010 .013	100 195
110 120									002	110
135							.139	.058		120 135
155 180							172	100	011	155
205							•172	.192	.401 .464	180 205
225 240							.135	.054		225 240
250									160	250
255 260							•070	• 056	154 156	255 260
265 270							.041	.043	1/3	265
275							164	172	150 16?	270 275
280 285									106	280
290							159	167	172 169	285 290
300 315							153	155		P OO
335									.130	315 335
		ALPHA	= 20.02,	PHI • 0.	O, 800Y	/WING/TAIL	/YAW DEFLE	CTIUN		
THE TA DF G	0.10				CP AT X/L=					THETA
0	0.10	0.20	0.30	0.40	0.50	0.60	0.70 102	0.85 07A	0.95 032	DEG O
25							-1102	~***	156	25
45 60							129	117		45 60
70 75									072	70
80							123	120	033 .016	75 80
85 90							106	111	.011 .022	85 90
95							.098	.114	.031	95
100 105							.139	.135	.032 .026	100 105
110 120									005	110
135							.225	.125		120 135
155 180							.269	.292	.076 .535	155 180
205 225							•••	****	.590	205
24C							.221	.120		225 240
250 255							.135		166	250
260								.122	155 156	255 260
265 270							.084	.100	161 152	265 270
275 280							103	100	163	275
285							170	178	168 173	260 285
290 300							1.70	175	170	290 300
315 335							• F V			315
									.025	335

TABLE 2.- Continued

(c) Continued

ALPHA = 25.02, PHI . 0.0, BODY/WING/TAIL/YAW DEFLECTION

ORIGINAL PAGE IS OF POOR QUALITY

			- 677727	****	.,					
THETA DEG	0.10	0.20	0.30	0.40	P AT X/L= 0.50	0.60	0.70	0.85	0.95	THE TA DEG
0 25							~.131	113	-80 Siz	0 25
45 60							160	136		45 60
70							340	120	. 027	70
75 80							148	138	.072 .079	75 80
85							138	136	.068	85
90							150		.061	90
95 100							.150	.189	.067 .068	95 100
10>							•216	.224	.051	105
110									.012	110
120 135							.329	- 204		120
155									.272	135 155
180							.384	-407	4685	180
205									.702	205
225 240							.324	.199		225 240
250							*35*	• • • • •	166	250
255							.213	.209	145	255
260 265							.142	176	149	260
270							•146	.175	157 153	265 270
275							192	184	166	275
							. 70		172	280
540 540							179	183	175 171	285 290
300							178	182		300
315										315
335									063	335
		ALPHA -	-5.02,	PHI = 0.0	, 80DY/	VING/TAIL	/ROLL DEFL	ECTION		
TMETA Deg	C.10	0.20	0.30	0.40	CP AT X/L- 0.50	0.60	0.70	0.05	0.95	THETA DEG
0					****	****	.029	.047	.216	0
25 45									117	25 45
66							.021	030		60
70 75							011	024	039 094	70 75
8C							011		121	80
85							.004	025	138	65
90 95							112	086	134 133	90 95
100							****		133	100
105							060	095	082	105
110 120							034	059	048	110 120
135								•••		
155										135
180 205							200		.169	155
725							009	•000	.116	155 180
							009	•000		155
240							009	•000 ~•054	.118 118	155 180 205 225 240
240 250							031	~• 054	.118 118	155 180 205 225 240 250
240 250 255 260							031 065	~•054 ~•095	.118 118 .045 026 067	155 180 205 225 240 250 255 260
240 250 255 260 265							031	~• 054	.118 118 .045 026 067 057	155 180 205 225 240 250 255 260 265
240 250 255 260 265 270 275							031 065 110	054 095 089	.116 118 .045 026 067 057	155 180 205 225 240 250 255 260 265 270
240 250 255 260 265 270 275 280							031 065 110 010	054 095 089 025	.116 118 .045 026 067 057 055 063 084	155 180 205 225 240 250 255 260 265 270 275 280
240 250 255 260 265 270 275 280 285							031 065 110	054 095 089	.045 026 067 057 055 063 084	155 180 205 225 240 250 255 260 265 270 275 280 285
240 250 255 260 265 270 275 280							031 065 110 010	054 095 089 025 024	.116 118 .045 026 067 057 055 063 084	155 180 205 225 240 250 255 260 275 285 280 290
240 250 255 260 265 275 280 285 290 300 315							031 065 110 010	054 095 089 025	.118 118 .045 026 067 057 063 084 067	155 180 205 225 240 255 265 270 275 280 285 290 315
240 250 255 260 265 270 275 280 285 290 300							031 065 110 010	054 095 089 025 024	.045 026 067 057 055 063 084	155 180 205 225 240 250 255 260 265 275 280 285 280 285

TABLE 2.- Continued

ALPHA = .02, PHI = 0.0, BODY/WING/TAIL/ROLL DEFLECTION

		_
(c)	Continued	ORIGINAL PAGE IS OF POOR QUALITY

THETA										
DEC	0.10	0.50	0.30	0.46	CP AT X/1	0.60	0.70	0.85	0.95	THETA DEG
0 25							006	.012	-151 130	0 25
45 60							012	~.043		45 60
70 75							032	065	00e 064	70 75
80							032	007	117	75 80
85							041	054	130	85
90									131	90
95 100							038	050	127	95
105							030	060	107 071	100 105
110							***************************************		035	110
120 135							010	041		120 135
155									-181	155
180 205							-009	.012	- 141	100
225									085	205 225
240							011	043		240
250									.006	250
255							030	056	061	255
260 265							042	054	103 118	260 265
27G							- 6046	-1034	104	270
275							038	052	115	275
260									110	280
285 290							035	055	086	285
300							013	041	038	290 300
315								•••		315
335									.167	335
		ALPHA -	5.02,	PHI - 0.	0, 800	r/wing/tail	/ROLL DEFL	ECTION		
THETA		ALPHA =	5.02,	PHI - 0.	CP AT X/					THETA
086	0.10	ALPHA =	0.30	PHI = 0.			0.70	C.85	0.95	DEG
030	0.1%				CP AT X/	L=			•125	0E6 0
0EG a 25	0.1%				CP AT X/	L=	0.70	C.85		DE6 0 25
030	0.17				CP AT X/	L=	0.70	C.85	•125 -•150	0 25 45 60
0 E G 2 5 4 5 6 0 7 0	0.15				CP AT X/	L=	0.70 023 034	C.85 002 C59	•125 ••150	0E6 0 25 45 60 70
0EG 25 45 60 70 75	0.1%				CP AT X/	L=	0.70 023	C.85	.125 150 .026 050	DEG 0 25 45 60 70 75
0EG 0 25 45 60 70 75	0.1%				CP AT X/	L=	0.70 023 034	C.85 002 C59	•125 ••150	0E6 0 25 45 60 70
0EG 25 45 60 70 75 80 85 90	0.1%				CP AT X/	L=	0.70 023 034 060 121	002 059 096 074	.125 150 .026 050 064 059	DEG 0 25 45 60 70 75 80 85
0EG 0 25 45 60 70 75 80 85 90	0.1%				CP AT X/	L=	0.70 023 034 060	C.85 002 059 096	.125 150 .026 050 064 059 071 107	0 25 45 60 70 75 80 85 90
0EG 0 25 45 60 70 75 80 85 90 95	0.1%				CP AT X/	L=	0.70 023 034 060 121 001	002 059 096 074	.125 150 .026 050 064 059 071 107	DE6 0 25 45 60 70 75 80 85 90
0EG 0 25 45 60 70 75 80 85 90	0.1%				CP AT X/	L=	0.70 023 034 060 121 001	002 059 096 074 022	.125 150 .026 050 064 059 071 107	DE6 0 25 45 60 70 75 80 95 90 95 100
0EG 25 45 60 70 75 80 85 90 100 105 110	0.1%				CP AT X/	L=	0.70 023 034 060 121 001	002 059 096 074	.125 150 .026 050 064 059 071 107 115	0 E 6 0 25 45 45 60 70 75 80 85 90 100 105 110 120
0EG 25 45 60 70 75 80 85 90 95 100 110 120	0.1%				CP AT X/	L=	0.70 023 034 060 121 001	002 059 096 074 022	.125 150 .026 050 064 059 071 107 115 095 058	0 E6 0 25 45 60 70 75 80 85 90 91 100 120 135
0EG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155	0.1%				CP AT X/	L=	0.70 023 034 060 121 001	002 059 096 074 022	.125 150 .026 050 064 059 071 107 115	DE6 0 25 45 60 70 75 80 85 90 95 100 120 120 135 155
0EG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205	0.1%				CP AT X/	L=	0.70 023 034 060 121 001 012	002 059 096 074 022 019	.125 150 .026 050 064 059 071 107 115 058	0 E6 0 25 45 60 70 75 80 85 90 105 110 120 135 155 180 205
0EG 0 25 45 60 70 75 80 85 90 95 100 105 110 120 135 155 180 205 225	0.1%				CP AT X/	L=	0.70 023 034 060 121 001 012 .018	C.85002059096074022019029	.125 150 .026 050 064 059 071 107 115 095 058	DE6 0 25 45 60 70 75 80 95 100 120 120 135 180 205 225
0EG 25 45 60 70 75 80 85 9C 95 100 105 11C 120 135 155 180 205 225 240	0.1%				CP AT X/	L=	0.70 023 034 060 121 001 012	002 059 096 074 022 019	.125 150 .026 050 064 059 071 107 115 095 058	0 E6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 155 180 205 225 225
0EG 0 25 45 60 70 75 80 85 90 95 100 110 120 135 155 180 205 225 240 255	0.1%				CP AT X/	L=	0.70 023 034 060 121 001 012 .018	C.85002059096074022019029	.125 150 .026 050 064 059 071 107 115 095 058	0 E6 0 25 45 60 70 75 80 85 90 100 120 135 159 180 205 225 240 250
0EG 25 45 60 70 75 80 85 9C 100 110 120 135 180 205 225 240 250 260	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013	002059096074022019029050	.125 150 .026 050 064 059 071 107 115 058 .261 .212 084	0 25 45 45 60 70 75 80 85 90 100 105 110 120 135 150 205 240 250 250 250
0EG 25 45 60 70 75 80 85 90 100 1120 1120 1135 1155 1180 205 225 240 250 260	0.1%				CP AT X/	L=	0.70 023 034 060 121 001 012 .018	C.85002059096074022019029	.125 150 .026 050 064 059 071 107 115 095 058	0 E6 0 25 45 60 70 75 80 85 90 100 109 110 120 139 155 180 205 225 240 250 265
0EG 25 45 60 770 75 80 85 90 100 1120 1120 1155 180 225 240 255 260 270	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013024	C.85002059096074022019029050029024029	.125 150 .026 050 064 071 107 115 095 058 .261 .212 084	0 E6 0 25 45 60 70 75 80 85 90 100 120 135 155 180 205 225 240 250 260 270
0EG 25 45 60 770 80 85 90 100 1120 1120 1155 1180 205 225 240 250 260 270 270 270 280	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013024111	C.85002059096074022019029029029029	.125 150 .026 050 064 059 071 107 115 095 058 .261 .212 084	0 E6 0 25 45 60 70 75 80 85 90 100 105 110 120 135 155 180 205 225 240 250 250 270 275 280
0EG 25 45 60 770 75 80 85 90 100 1120 1120 1155 180 225 240 255 260 265 270 280 285	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013024	C.85002059096074022019029050029024029	.125 150 .026 050 064 071 107 115 095 058 .261 .212 084	0 E6 0 25 45 60 70 75 80 85 90 100 120 130 130 155 180 205 225 240 250 270 275 280 285
0EG 25 45 60 70 75 85 9C 100 110 120 135 180 205 240 255 240 255 270 275 280 290	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013024111059	C.85002059096074022019029029029029029029029	.125 150 .026 050 064 059 071 107 115 095 058 .261 .212 084	0 E6 0 25 45 60 77 75 80 85 90 100 120 135 150 205 240 250 260 265 270 285 290
0EG 25 45 60 770 75 80 85 90 100 1120 1120 1155 180 225 240 255 260 265 270 280 285	0.1%				CP AT X/	L=	0.70023034060121001012 .018 .039 .017013024111	C.85002059096074022019029029029029	.125 150 .026 050 064 071 107 115 095 058 .261 .212 084	0 E6 0 25 45 60 70 75 80 85 90 100 120 130 130 155 180 205 225 240 250 270 275 280 285

ORIGINAL PAGE IS OF POOR QUALITY

TABLE 2.- Contir &.

THETA					CP AT X/L-					THE
OEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DF
0							040	015	.127	1
25									158	2
45										4
60							062	083		6
70									017	7
75							146	115	001	7
80									•009	8
85							145	110	.017	8
90 95									.018	9
100							.017	.007	.020	9
105									.015	10
110							.021	.012	~.029	10
120							.068	-002	095	11
135							•000	.002		12
155									.376	15
100							.093	.107	.304	10
205							.073	.101	072	20
225									-1012	22
240							-065	-002		24
250							****	••••	070	25
255							.021	.008	106	25
260								••••	136	26
265							.008	002	150	26
270							*****	****	141	27
275							145	163	158	21
280									158	26
285							144	154	-,154	28
290									147	29
300							060	079	_	30
315										31
325									.127	33

		ALPHA :	15.00,	PHI = 0.0	80077	wING/TAIL	/ROLL DEFL	ECTION		
THETA					CP AT X/L=					THETA
DEE	6.10	0.20	0.30	0.40	G.50	0.60	0.70	0.85	0.95	DEG
0							075	051	030	0
25									151	25
45										45
60							:61	105		60
70									096	70
75							160	104	105	75
60									076	80
85							166	101	05.	85
90								· · · -	044	90
95							.046	.051	076	95
106									110	100
105							.069	.062	123	105
110							• • • •		170	110
120							.135	.055	••••	120
135							****	****		135
155									.500	155
180							-170	.190	.421	180
205							****	••••	030	205
225									****	225
240							.134	.054		240
250							••••	••••	068	250
255							.070	.057	102	?55
260								•071	136	260
265							.043	.044	165	265
270							.043	.077	157	270
275							164	173	169	275
280							104	1/3		
285							- 140	. 349	170	280
590							160	168	.166	285
30C									161	290
							158	160		300
315 335										315
337									.099	335

TABLE 2.- Concluded OF POOR QUALITY

(c) Concluded

ALP4A . 20.02, PHI . 0.0, BODY/WING/TAIL/RGLL DEFLECTION

THETA					CP AT X/L					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.85	0.95	DEG
0							103	080	053	0
25									158	25
45 60							174	142		45 60
70							-4114	-0145	130	70
75							169	144	070	75
80									006	80
85							185	136	019	85
90									075	90
95							•090	-108	114	95
100									135	100
105							-134	•158	143	105
110							221		183	116
126 135							•551	•121		120 135
155									.621	155
160							•267	.290	.559	100
205									.054	205
225										225
240							•551	•121		240
250									058	250
255							•136	.125	086	255
260							•••		120	260
265							-087	•103	156	265
270 275							184	_ 177	162 168	270 275
280							104	177	165	260
285							171	176	156	285
290							••••		155	290
300							171	172		300
315										315
335									0:5	335
		ALPHA -	25.00,	PHI • 0.0), BODY/	wing/tail/	ROLL DEFLI	CTION		
								-		
THETA					CP AT K/L-					THETA
DEG	0.10	0.20	0.30	0.40	0.50	0.60	C.70	0.85	0.95	DEG
0							- 122	- 115	- 103	^
25							132	115	103 178	0 25
45									2 1 0	45
6C							176	148		60
70									096	70
75							173	154	051	75
80									055	80
65 90							189	148	113	85
95							.147	-101	131 130	90 95
100							***	*101	142	100
105							-209	.214	146	105
110									184	110
150							.323	.198		120
135										135
155									.705	155
180 205							.380	.405	.699	180
225									.240	205 225
240							•324	•201		240
250									031	250
255							.215	-212	067	255
260									099	260
265								.180	135	
270							.148	••••		265
275 .80									159	265 270
285							•148 -•192	171	159 160	265 270 275
							192	171	159 160 158	265 270 275 280
290									159 160 158 147	265 270 275 280 285
							192 179	171 173	159 160 158	265 270 275 280 285 296
290 300 315							192	171	159 160 158 147	265 270 275 280 285
2 9 0 300							192 179	171 173	159 160 158 147	265 270 275 280 285 296 300

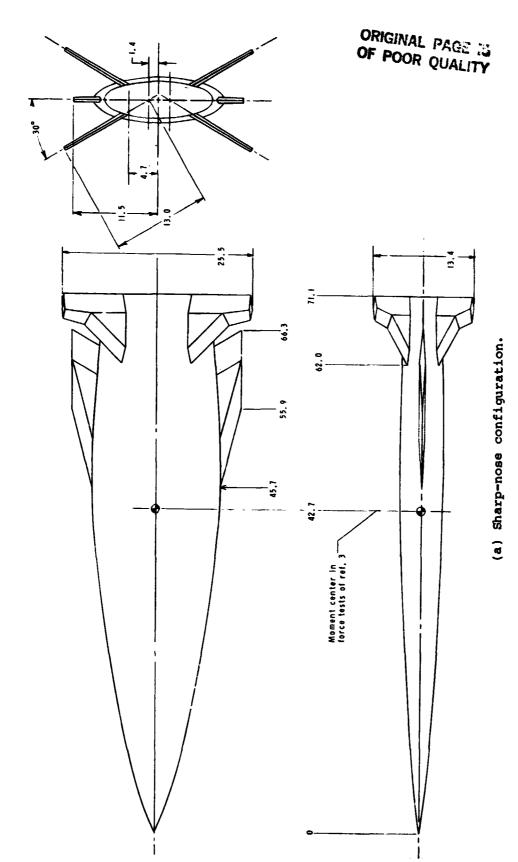
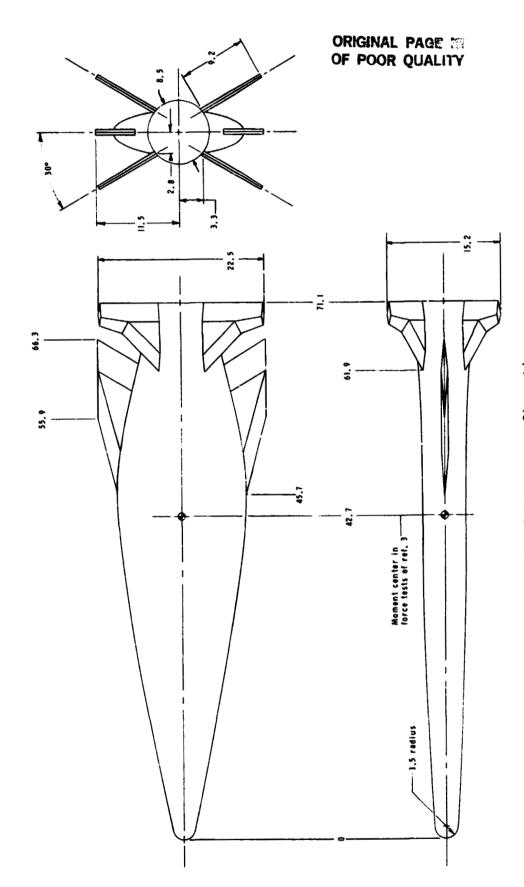
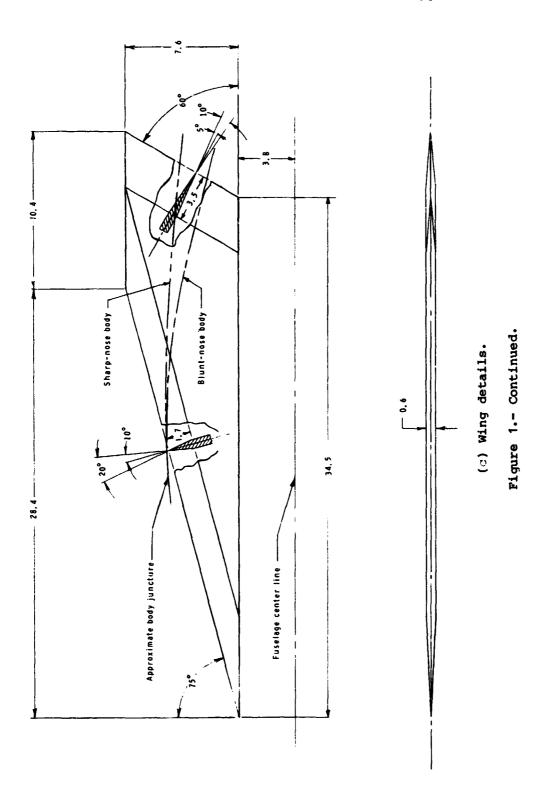


Figure 1.- Model details. All dimensions are in centimeters unless otherwise noted.



(b) Blurt-nose configuration.

Figure 1.- Continued.



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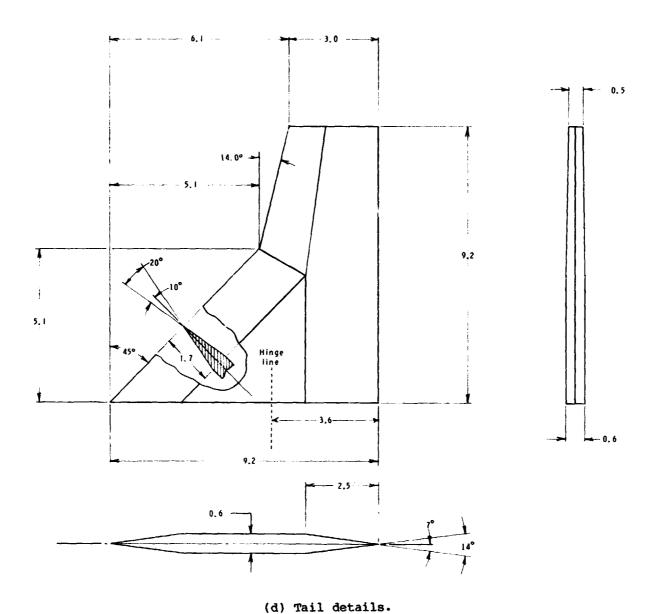


Figure 1.- Concluded.

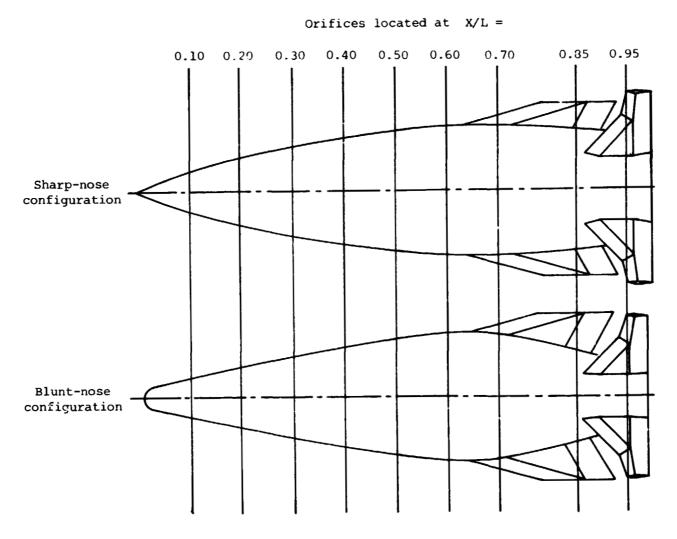


Figure 2.- Longitudinal locations of pressure orifices.

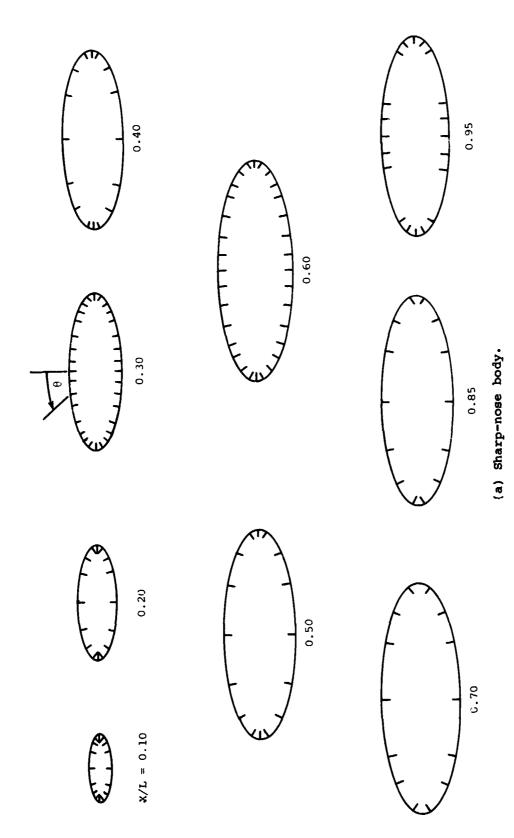
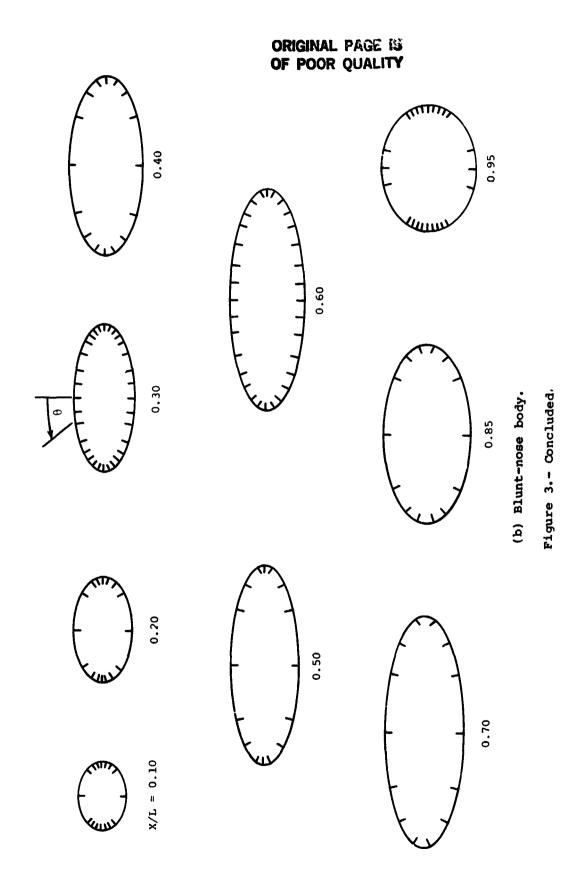
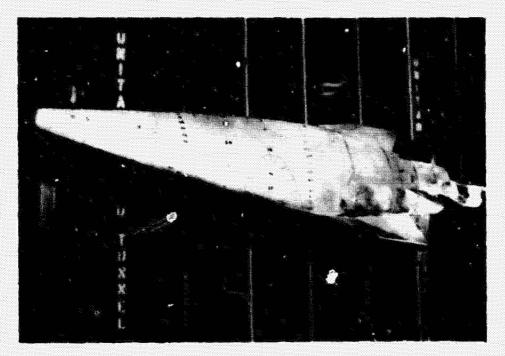
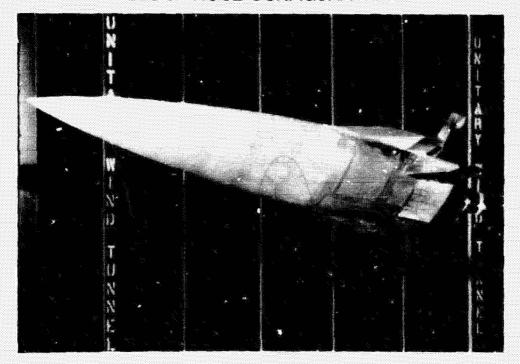


Figure 3.- Circumferential location of pressure orifices, looking upstream.





BLUNT-NOSE CONFIGURATION



SHARP-NOSE CONFIGURATION

L-83-3375

Figure 4.- Model photographs.

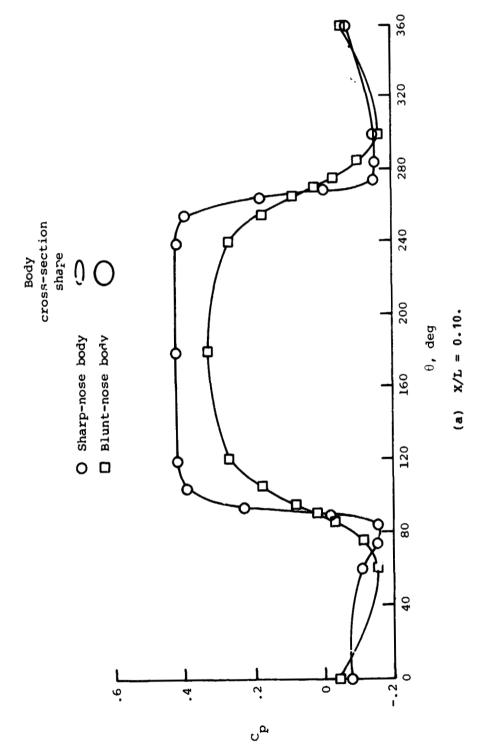
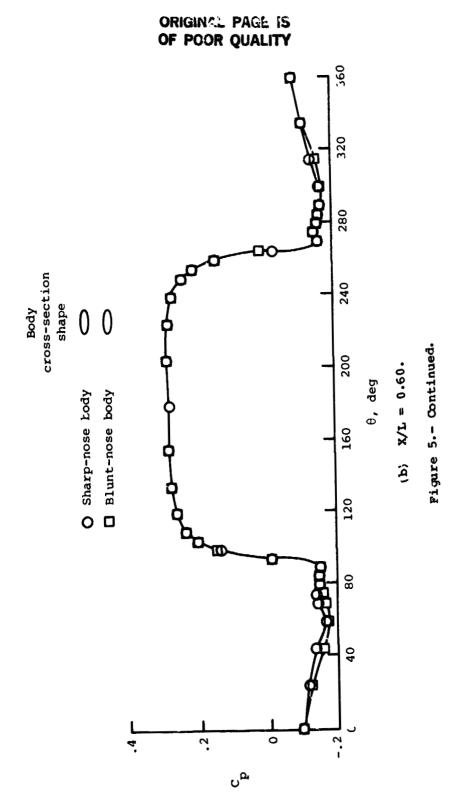
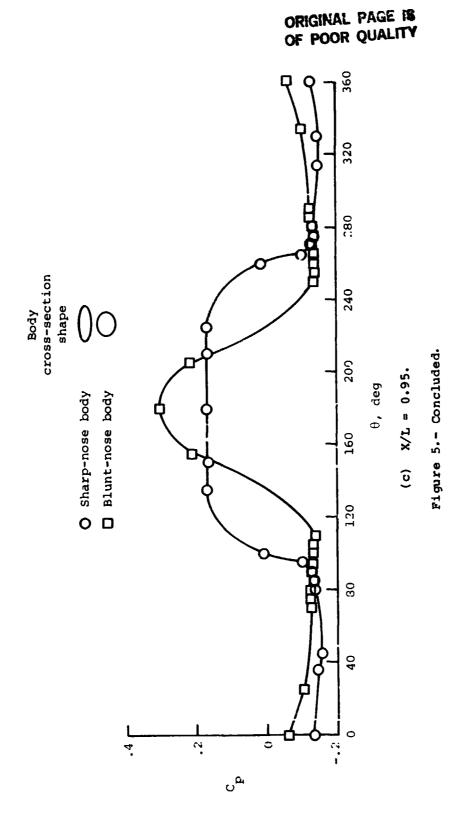
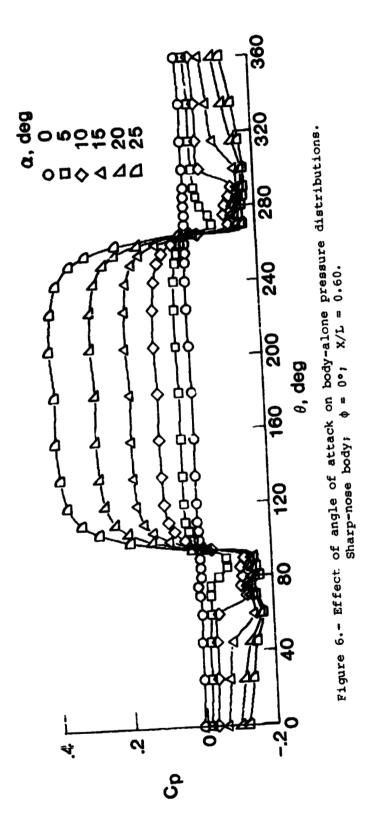
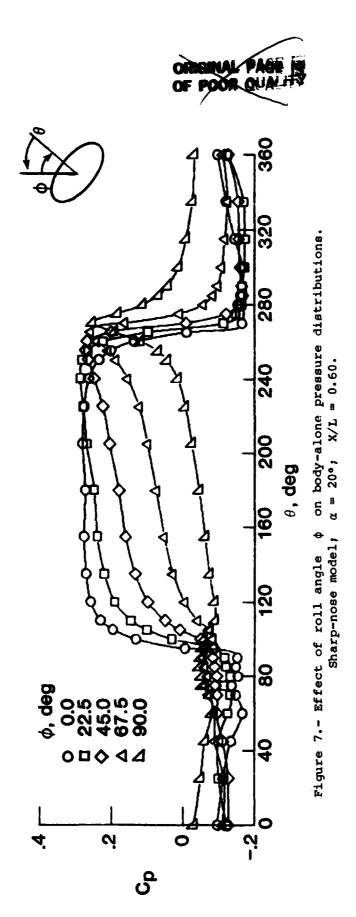


Figure 5.- Effect of body shape on body-alone pressure distributions. $\alpha = 20^\circ; \quad \varphi = 0^\bullet.$









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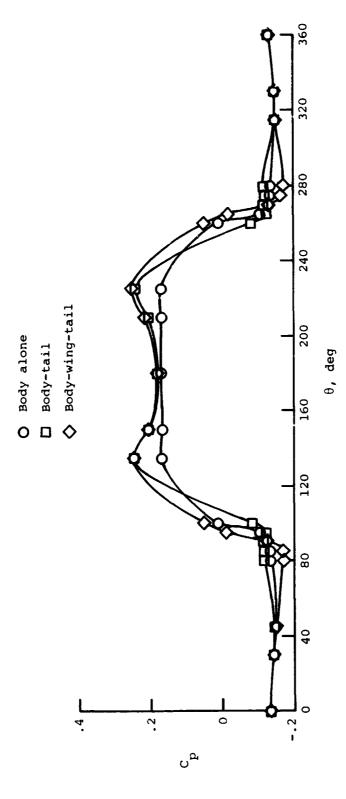
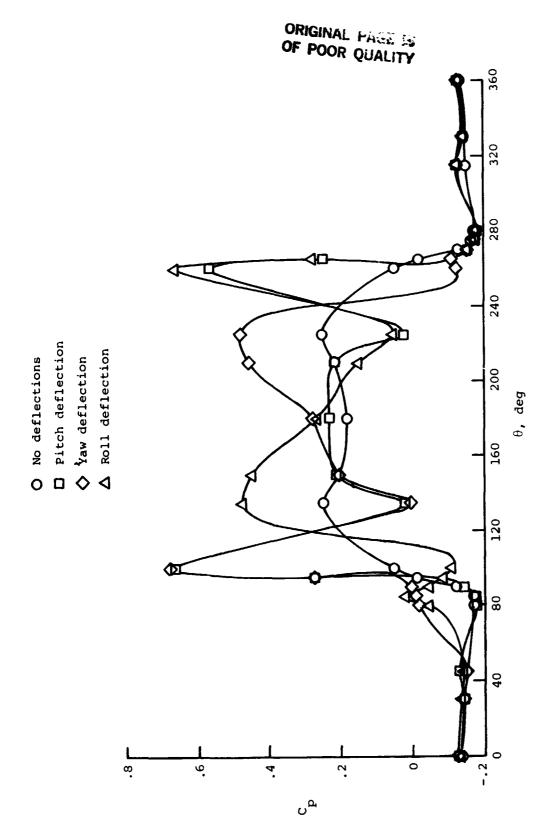


Figure 8.- Effect of fins on pressure distributions. Sharp-nose model; no fin deflections; $\alpha = 20^{\circ}$; $\phi = 0^{\circ}$; X/L = 0.95.



Figur: 9.- Effect of tail-fin deflections on body-wing-tail configuration pressure distributions. Sharp-nose model; $\alpha=20^{\circ}$; $\phi=0^{\circ}$; X/L = 0.95.